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## JOINT APPLIED PROJECT

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### U.S. ARMY CONCEPT OF OPERATIONS AND STANDARD OPERATING PROCEDURE FOR ACQUISITION PROGRAM MANAGERS USING ITEM UNIQUE IDENTIFICATION

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September 2017

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**U.S. ARMY CONCEPT OF OPERATIONS AND STANDARD OPERATING  
PROCEDURE FOR ACQUISITION PROGRAM MANAGERS USING ITEM  
UNIQUE IDENTIFICATION**

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Submitted in partial fulfillment of the requirements for the degree of

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# **U.S. ARMY CONCEPT OF OPERATIONS AND STANDARD OPERATING PROCEDURE FOR ACQUISITION PROGRAM MANAGERS USING ITEM UNIQUE IDENTIFICATION**

## **ABSTRACT**

Item Unique Identification (IUID) is a system that will be used by Department of Defense to track identical objects separately by applying a unique identifying mark. This thesis explores Item Unique Identification (IUID) Basics written in 2010, the requirements for qualifying items, and guidelines for how items are marked with a data matrix either directly on the item or on a permanent machine-readable label attached to the item. Since the 2004 congressional mandate for using IUID, the Army has struggled to meet the requirement and, to date, has failed. This concept of operations (CONOPS) provides the analysis and recommendation of a path forward in IUID across Program Executive Offices (PEO) Command Control and Communications-Tactical and Combat Support and Combat Service Support (PEO CS&CSS). The objective was to create a CONOPS for Army PEOs and PMs with a comprehensive overview of IUID and implementation plan to support their materiel-fielding mission with a narrow focus on PEOs C3T and CS&CSS. IUID is an essential tool for use in marking, fielding, inventorying, and warehousing equipment.

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

ACAT	Acquisition Category
AK	Assault Kitchen
AI	Application Identifiers
AIT	Automatic Identification Technology
AMC	Army Material Command
AMIS	Automated Movement and Identification Solution
ANS	American National Standard
APSR	Accountable Property System of Record
CAGE	Commercial and Government entity
CL	Supply Class
CLIN	Contract Line Item Number
CLS	Contractor Logistics Support
DI	Data Identifiers
DID	Data Item Description
DOA	Department of the Army
DMWR	Depot Maintenance Work Requirements
DPAS	Defense Property Accountability System
ECC200	Error Checking and Correction 200
ERP	Enterprise Resource Planning
FLIS	Federal Logistics Information System
IEC	International Electrotechnical Commission
ILSC	Integrated Logistics Support Center
IUID	Item Unique Identification
LMP	Logistics Modernization Program
LOGSA	Logistics Support Activity
NMWR	National Maintenance Work Requirements
OEM	Original Equipment Manufacturer
PADDS	Procurement Automated Data and Document System
PBL	Performance Based Logistics
PBUSE	Property Book Unit Supply Enhanced
PEO C3T	Program Executive Office Command Control Communications-Tactical

PEO CS&CSS	Program Executive Office Combat Support and Combat Service Support
PIN	Personal Identification Number
PIPC	Property in Possession of Contractors
PSM	Product Support Manager
SAP	System Application Product
SIM	Serialized Item Management
SYSPARS	System Planning and Requirements Software
TACOM	U.S. Army Tank-Automotive & Armament Command
TAMMS-D\MCDS	The Army Maintenance Management System-Aviation/Maintenance Consolidated Database System
TRH	Tray Ration Heater
UI	Unique Identifier
UID	Unique identification
UII	Unique Item Identifier
WAWF	Wide Area Workflow
WISE	Warfighter Information & Support Exchange

## **EXECUTIVE SUMMARY**

This document is to provide Army Acquisition PMs (APMs) and Product Support Managers (PSMs) with a comprehensive overview on how to effectively implement IUID requirements for their programs consolidating many divergent pieces of guidance into one location.

IUID is a system that will be used by Department of Defense (DOD) to track identical objects separately by applying a unique identifying mark. According to Item Unique Identification the Basics (2010), “IUID requirements for qualifying items will be marked with a data matrix either directly on the item or on a permanent machine-readable label attached to the item” (p. 12). Since the 2004 congressional mandate for using IUID, the Army has struggled to meet the requirement and to date, has failed. This concept of operations (CONOPS) provides the analysis and recommends of a path forward in IUID across Program Executive Offices (PEO) Command Control and Communications-Tactical (PEO C3T) and Combat Support and Combat Service Support (PEO CS&CSS). The objective is to create a CONOPS for Army PEOs and PMs with a comprehensive overview of IUID and an implementation plan to support their materiel fielding mission with a narrow focus on PEOs C3T and CS&CSS.

This CONOPS and analysis will assess whether appropriate policies are in place for tracking a Gaining Unit’s reportable equipment, and provide procedures for doing so. Once approved, PMs/Units will be held responsible for implementing IUID in accordance with (IAW) these regulations. AR 700–145 states that PMs will ensure that IUID clauses are included in all contracts, and materiel is registered in the DOD IUID registry (Department of the Army, 2016). PMs will scan the material to ensure the bar code with unique identifying information is readable, thereby ensuring that the IUID is capable of being captured on the “smart form” in the Logistics Modernization Program (LMP). The gaining unit will actually scan the IUID for all trackable, fielded equipment, verifying its accuracy once uploaded into the Global Combat Support System-Army (GCSS-A), also called G-Army. This will be for tactical fielded equipment only. The Defense Property Accountability System (DPAS) will be utilized for a unit’s non-fielded property

This CONOPS has a narrow focus tailored for Program Executive Office Command Control Communications-Tactical (PEO C3T) and Program Executive Office Combat Support and Combat Service Support (PEO CS&CSS). However, the document is written in such a way as to be easily adapted for use by any other PEO or any organization within Assistant Secretary of the Army and Acquisition, Logistics and Technology or Army Material Command.

## **List of References**

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## I. BASICS OF ITEM UNIQUE IDENTIFICATION

This chapter focuses on Item Unique Identification (IUID) basics for Project Managers (PMs), Product Managers (PdMs), and Assistant Product Managers (APMs). Although this document is intentionally narrowly focused on Program Executive Office Command, Control and Communications-Tactical (PEO C3T) and Program Executive Office Combat Support & Combat Service (CS&CSS), other PEOs and PMs are welcome to utilize the consolidated information contained in this CONOPS and modify the work-arounds to meet particular missions. The goal of this project is to provide a single document where the PM can reference IUID requirements, responsibilities, and work-arounds to overcome current shortfalls in Army automated systems. For simplicity, we will group all into the term PM throughout the document. IUID is the system of marking items and Unique Item Identifier (UII) is a set of marks on an item that is unique. Information on the subject is found in various Department of Defense (DOD) and Army resources, but the intent of this CONOPS is to provide a concise one stop shop for PMs. Short video produced by Department of Defense (2014) *IUID Overview* provide a good explanation on IUID. Readers should watch this video now.

### A. WHAT IS IUID?

IUID is a requirement to uniquely mark new items attained through contracts and legacy items in Army inventory for track ability purposes. When implementing IUID, the first step is to mark and register items. According to Department of Defense (2007),

**Unique Identifier (UI):** A character string, number, or sequence of bits assigned to a discrete entity or its associated attribute which serves to uniquely distinguish it from other like and unlike entities. Each unique identifier has only one occurrence within its defined scope of use (p. 8).

**Unique identification (UID):** A system of establishing globally unique and unambiguous identifiers within the Department of Defense, which serve to distinguish a discrete entity or relationship from other like and unlike entities or relationships (p. 8).

**IUID:** A system of marking items by establishing unique item identifiers (UII) within the DOD by assigning a machine-readable character string or

number to a discrete item, which serves to distinguish it from other like and unlike items (p 8).

#### Item Unique Identification the Basics (2010)

describes **UII** is a set of data elements marked on an item that is globally unique and unambiguous (p. 3).

The requirement for IUID applies to new items attained through contracts and legacy items in Army inventory. Implementing IUID first step is marking and registering items. UIIs shall be used universally as the common data key in financial; property accountability, acquisition, supply, maintenance, and logistics automated information system (AIS) to provide asset valuation, life-cycle management, and accountability (Office of the Deputy Secretary of Defense Acquisition, Technology & Logistics, 2014).



Figure 1. Sample of construct II UII mark

#### B. BENEFITS OF IUID

The use of IUID has many benefits to the PM, which include information sharing between all stakeholders, improved life-cycle management, improved financial accountability, improved asset visibility, and improved auditability. Combined with Automated Information Technology (AIT), our fielders and logisticians will be able to identify failure trends, overall reliability, and optimize the PMs Logistics footprint allowing for a reduction in total ownership costs (Logistics Item Unique Identification Task Force, 2010). Using IUID in fleet management will result in increased capability to project future requirements, improve readiness, and identify sustainment trends. Warranty management can be increased using IUID to identify items under warranty, identify counterfeit parts, and schedule the issue of items to maximize use while under warranty. Another benefit of using IUID is increased auditability and property accountability.

### C. DOES MY ITEM NEED TO BE MARKED WITH IUID?

OSD is in the process of revising the IUID requirement. DOD Instruction (DODI) 8320.04 was revised in September 2015. Defense Federal Acquisition Regulation Supplement (DFARS) 211.274-2 revision is pending. AR 700-145 was revised in February 2016. A new interim Army Serialized Item Management (SIM) policy was published as Army Directive 2016-21 in May 2016.

Army items requiring serial number management will require IUID. This includes items that fall below the \$5000 acquisition threshold. Some good examples that fall into this category are tactical radios, secure Global Positioning Devices (GPS), and cryptographic devices. Many of these have an acquisition cost of less than \$5000 but are required to be serial number managed due to their sensitivity. Refer to Figure 2 for a decision process for determining whether an item requires IUID marking.

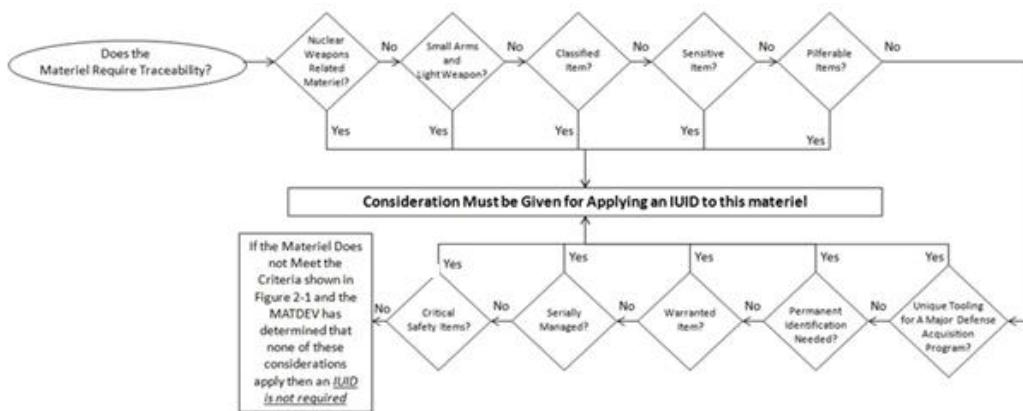


Figure 2. Items requiring IUID. Source: Department of the Army (2016).

### D. STAGES OF IUID IMPLEMENTATION

Stage 1 – Write IUID Plan and determine items to be marked. IUID plans are devised during acquisition phase milestone B. The Product Support Manager (PSM) work closely with logisticians and engineers and equipment is marked IAW regulations.

Stage 2 – Document and determine how and where to mark. PSM often delegates where mark location and data elements for creation. Depot Maintenance Work

Requirements (DMWR), National Maintenance Work Requirements (NMWR) or Statement of Work (SOW) will address the marking of items already in inventory and remarking items going through depot-level maintenance.

Stage 3 – Mark items and register pedigree information. Systems are marked according to the IUID Plan. Original Equipment Manufacturer (OEM) work closely with PMs to ensure IUID marks have been created with a readable mark. OEMs input IUID into the DOD registry, as shown in Appendix B.

Stage 4 – Use the UII in business process – create value. Involves integration of AIT in AIS. Three enablers must be in place to use the data in AIT. Items that need to be managed uniquely need to be marked with a data matrix containing UII information. AIS must be able to deal with the UII data element. AIT in form of imagers that read and decode the data matrix mark must be integrated with AIS.

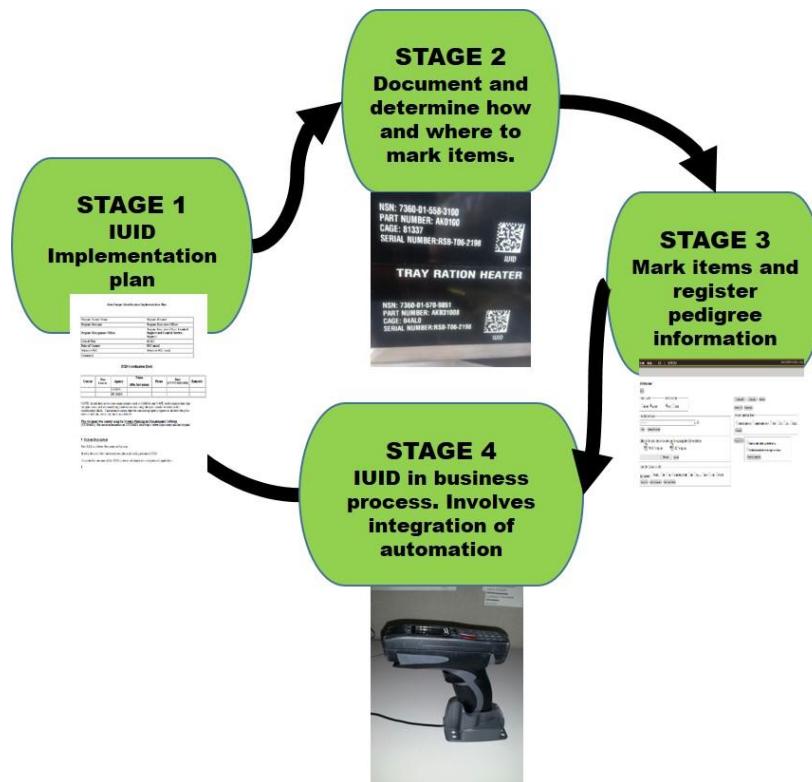


Figure 3. Stages of IUID

## E. BUSINESS RULE

According to “Tips on Encoding the Unique Item Identifier (UII) Mark and Building the Concatenated UII” (2006), “UII shall be derived from its discrete component data elements or UII data set encoded as a separate data element” (p. 45).

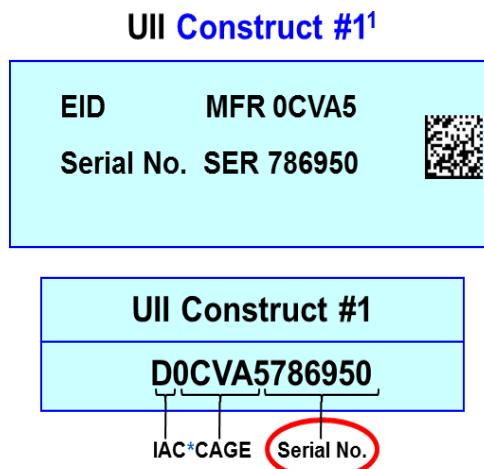


Figure 4. Sample of UII construct #1. Source: Department of the Navy (2011).

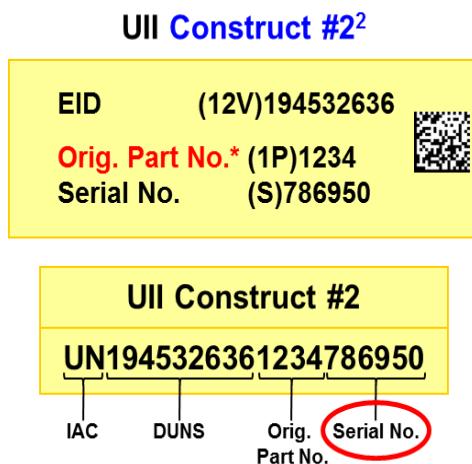


Figure 5. Sample of UII construct #2. Source: Department of the Navy (2011).

Using Construct #1, serialization within the enterprise, and Construct #2, serialization within part number, are the most frequent options chosen. DOD policy does not allow specifying to a supplier which construct is to use; the anticipation is that they

will use whichever serialization convention they normally use (within enterprise or part number). Construct 1 and 2 are commonly used; however, there are more constructs that are acceptable for creating a conforming IUID mark. Conforming IUID marks consist for construct 1 is IAC, cage and serial number and Construct 2 is IAC, original part numbers, and serial number (Tips on encoding the unique item identifier (UII) mark and building the concatenated UII, 2006).

Note that the UID data elements enclosed in the data matrix symbol can be included on the item in human readable form. UII construct #2 numbers in parenthesis are data qualifiers; i.e., 12V, 1P, and S (Tips on encoding the unique item identifier (UII) mark and building the concatenated UII, 2006).

## **II. REQUIREMENTS AND GUIDANCE ANALYSIS**

IUID requirements derive from Department of Defense's *Unique Identification (UID) Standards for a Net-Centric Department of Defense* (DOD Directive 8320.03, 2007), which mandates the services

establish policy and prescribe the criteria and responsibilities for creation, maintenance, and dissemination of UID data standards for discrete entities. UID standards will enable on-demand information in a net-centric environment, which is an essential element in the accountability, control, and management of DOD assets and resources. (p.1)

It further calls “for the establishment of the Department’s integrated enterprise-wide UID strategy and for the development, management, and use of unique identifiers and their associated authoritative data sources in a manner that precludes redundancy (p. 5).” It directs Office of the Deputy Secretary of Defense (Acquisition, Technology & Logistics [AT&L]) (V 2.5) (2012) *Assuring Valuation, Accountability and Control of Government Property* to review this directive within 2 years to determine if it should remain current and make improvements to content, clarity, and brevity, as necessary (p. 5). It further directs (USD[AT&L]) to publish a DOD issuance for defining, implementing, and maintaining the UID standards for DOD personal property in coordination with the DOD components. DOD Directive 8320.03 from 2007

states establish and maintain compatible data standards for the association of personal property, real property, and radio frequency identification, where applicable, and to develop and issue policy guidance for defining, implementing, and maintaining the UID standards for acquisition programs, in coordination with the DOD Components. (p. 3).

This directive is very broad in nature and aside from directing the services to “do” UID, it does not provide any guidance on “how” to accomplish it.

Early guidance from DOD Directive 8320.03, assuring valuation, accountability and control of government property (Department of Defense Guide to Uniquely Identifying Items), issued an Army IUID Implementation Plan to be used by PEO/PMs. Guidance was issued to ensure all current contracts included DFARS Clause 252.211-7003 (2016) *Item Unique Identification and Valuation* and Department of Defense (2012)

*Identification Marking of U.S. Military Property* (w/change 1)(MIL-STD-130N). The DFARS clause was vague when it came to how Original Equipment Manufacturers (OEMs) were to create markings and what type of items needed to be marked. The IUID Implementation plans lacked clear guidance to OEMs on where to mark equipment, what type of labels to create, what requirements and definitions to use for data plate readable data, and what data elements to use for creation of the construct. PEOs/PMs/OEMs could not take the DFARS or the IUID Implementation Plan and create, register, or use the IUID markings for inventory or fielding of equipment. MIL-STD 130M was added to contracts and PEOs/PMs discovered, after trying to scan the IUID mark, that OEMs needed the latest MIL-STD 130N in contracts to create valid marks. The critical change by Department of Defense (2012) “changed Appendix A to show how IUID data elements are linked together to derive an UII” (p. iii). OEMs started using MIL-STD-130N, and IUID marks are now better able to be scanned by this change. However, problems of clarity still exist.

A major gap was identified by PEO CS&CSS in 2009 when a Lean Six Sigma Project identified that some new contracts had IUID markings but legacy items needed to be marked and registered. However, the team identified many improper markings from all production sources which increased the quantity and costs to re-mark items. It was determined that OEMs had a poor understanding of what it takes to create a proper mark, MIL STD 130N, how to properly register the mark, and how to inspect the process. Common problems were that UII was constructed incorrectly because serial numbers were not used and were incorrect (such as missing extra characters); IUID marks were placed in bad locations and not easily scanned, so marks were destroyed; wrong material was used to create the mark, which was not tested or the mark was created with a label that was not permanent; and improper validation/verification also occurred.

IUID Implementation plans were updated to include requiring OEMs to submit IUID marks for verification/validation by the PEO/PMs, prior to acceptance. Although requirements have been more clearly defined in Scopes of Work and Subject Matter Experts (SME) have been trained to help OEMs with creating IUID marks, DFARS clauses are still very vague on how to create the marks correctly, despite updated

guidance from MIL-STD-130N, which introduced construct 1 and 2, creation of UID marks. Furthermore, it was determined that the Defense Contract Management Agency (DCMA) was not responsible for ensuring accuracy of UID compliance. Follow on guidance directed PMs to be responsible instead for the verification/validation of marks, as stated above.

The focus at the beginning of the IUID effort was getting the equipment marked and input into the DOD IUID registry. The Army mandated that all legacy Class VII items be marked and registered by 31 December 2010 and Class II by 31 December 2015. Regulations and guidance did not instruct the Army how to properly mark equipment for the UID mark, nor did the Army provide scanners to use the mark, at least initially. Instead, the Army Material Command (AMC) created a team to go across the Army and mark legacy equipment. These marks consisted only of the OEM cage code and random numbers, rather than using or including serial number from data plates. The AMC goal was only to get the equipment labeled with a UID tag and registered in the DOD registry (Deputy Assistant Secretary of the Army Acquisition Policy and Logistics, 2013).

An additional mandate from O'Neill, M (2010) directed PEO/PMs to ensure IUID data was entered into Property Book Unit Supply Enhanced (PBUSE) prior to equipment fielding. This was another mandate issued without sufficient guidance for implementation, and funds were not provided to do so. PEO CS&CSS & PEO C3T implemented work arounds to meet this mandate. PEO CS&CSS purchased Smart Scanners and PEO C3T used WISE to get IUID implemented into their fielding process.

Eventually, the Army invested in scanners for units, but they did not provide guidance or procedures, so the provided scanners went unused. Additionally, despite the DOD finally publishing multiple instructions, directives, publications, DFARS clauses, memorandums, and standards in relation to IUID, our analysis of DFARS clause MIL-STD 13 and DODI 5000.64 shows that there is not sufficient guidance on what should be marked, where it should be marked, and when it should be marked. The published guidance is scattered and hard for PMs to follow (Department of Defense, 2011). One of the goals of this CONOPS is to bring all of that relevant information into one useful guide. Our analysis has determined that the DOD failed to be consistent in its

development of our automated property accountability systems in terms of IUID implementation and failed to provide Material Developers (MATDEVS) an efficient way to be compliant. Within the Army, we currently utilize four separate property accountability systems (PBUSE, GCSS-A, LMP, and DPAS), which is extraordinarily cumbersome. The systemic issue that our analysis uncovered is that these systems are not synchronized in their development and certainly do not provide the ability for PMs to execute their mission in an effective manner. The focus of the next chapter is to lay out, in a simple format, how to accomplish the IUID tasks and provides “work arounds” for PMs to use in order to bridge the gap with the current automated systems.

#### **A. POLICY AND GUIDANCE SUMMARY**

DFARS Clause 252.211-7003 (2016) provides “definitions of IUID-related terms and IUID requirements for identified items; requires IUID requirements to be included in subcontracts if applicable” (para. (a)(g)).

This DFARS clause is written very vaguely and does not provide guidance to OEMs and lacks contract guidance for what items need to be marked, why items need to be marked, what material to use, where to mark, and how a mark will be used through its life-cycle. Paragraph (4) Data syntax and semantics of unique item identification does not give specifics on how to verify that the mark will be able to be scanned by a reader. This clause should include unique identifiers that should be readable by JavaScript & Optical character readers, full IDI Smart-Scan app suite including UID data validation, parsing, and UII output. This document discusses in more detail about the IDI Smart Scanner and using it in the UID process. Paragraph (f)(2)(ii) directs the contractor to submit data to the IUID registry using <http://dodprocurementtoolbox.com/site/uidregistry/> but the problem is this link is no longer valid. The link should be updated to <http://dodprocurementtoolbox.com/site-pages/overview-data-submission>.

PEOs/PMs/OEMs have identified problems with making changes to DOD registry once data has been input into the registry. This guidance has been an ongoing issue and only Logistics Support Activity (LOGSA) has the capability to correct marks which results in bad data inside of the registry.

Department of Defense (2012) (w/change 1)(MIL-STD-130N) provides

item marking criteria for development of specific marking requirements and methods for identification of items of military property produced, stocked, stored, and issued by or for the DOD, including criteria and data content for both free text and machine-readable information (MRI) applications, including IUID (p. ii).

MIL-STD 130N identified the information needed for OEMs to create the mark and how to verify/validate the mark. Table VIII is helpful guidance to PEOs/PMs/OEMs on examples of readable data and creating labels to mark equipment. Table VI is helpful but lacks the special character string that has been included in this document to create the IUID mark. Many OEMs find the information in MIL-STD 130N confusing and inadequate for creating marks that are readable by a scanner. Adding to MIL-STD 130N verification/validation procedures, such as those identified in Stage 3, will provide appropriate and necessary practical guidance to PEOs/PMs/OEMs.

DOD Instruction 5000.64 (2011) requires

Accountability of property be enabled by IUID for identification, tracking, and management in accordance with DoDD 8320.03 (p. 9).

Accountable property records be established in an accountable property system of record (APSR) (p. 6).

A Unique item identifier or DOD recognized IUID equivalent, if available and necessary for unique identification, in addition to other data elements, at a minimum, of an APSR (p. 12).

Organizations to retain accountability for property they place in an in-transit status, at a minimum requiring records of:

- a. Part number, NSN, serial number, UII, or DOD recognized IUID equivalent, nomenclature, quantity, and value of items shipped from contractors or vendors for which title has passed to the Government (p. 12).
- b. Part number, NSN, serial number, UII, or DOD recognized IUID equivalent, nomenclature, quantity, and value of items shipped from one organization to another organization, for which accountability is retained by the accountable organization until receipt and acceptance by the consignee (p. 12).

- c. Part number, NSN, serial number, UII, or DOD recognized IUID equivalent, nomenclature, quantity, and value of items being moved from one location to another location within an organization (p. 12).

Enclosure 2 of this guidance identifies that Heads of DOD Components establish APSR for accountability using serial number and UII for traceability. Logistics Management Program (LMP) has not been certified as an APSR. Forthcoming guidance will address this issue, as PBUSE will not be functional 1 September 2017. PEOs/PMs will again be forced to use work arounds until an APSR is established to use for fielding PEO/PM assets.

DCMA is currently collecting data on contract clause compliance. OSD Policy has been issued which requires each Service/ Agency to report their IUID clause compliance metrics quarterly and directs the Defense Procurement and Acquisition Policy office to perform their own calculations to verify the results. PMs have several issues to work through to ensure proper IUID implementation. The DFARS and DODI 8320.04 are not synchronized yet and they do not specify within the contract how the contractor creates UIIs. They also do not specify within the contract how the contractor encodes the IUID Data Matrix. Data Item Descriptions (DID) exist and are added to this chapter for convenience. Getting the Contract Line Item Number (CLIN) structure right avoids most IUID problems in contracts.

## **B. IUID REQUIRED DFARS CLAUSES**

There are five IUID-related clauses in the Code of Federal Regulation (CFR) are required to be in all contracts. All of the below clauses are added in Appendix G to this document for ease of use.

DFARS Clause 211.274-2 Policy for Unique Item Identification  
DFARS Clause 252.211-7003 Item Identification and Valuation  
DFARS Clause 252.211-7007 Reporting of Government-Furnished Property  
DFARS Clause 252.211-7008 Use of Government-assigned Serial Numbers  
DFARS Clause 252.232-7003 Electronic Submission of Payment Requests and Receiving Reports

## **C. IUID REQUIRED DID CLAUSES**

DI-MGMT-81803, (2011) IUID Marking Plan

DI-MGMT-81804A, (2013) IUID Marking Activity, Validation, and Verification Report

DI-MGMT-81858, (2012) IUID Marking and Verification Report

Adding DID clauses to contracts has provided additional guidance to OEM/depot personnel when trying to create valid IUID. DIDS DI-MGMT-81803 (2011), and DIDS-DI-MGMT 81804A (2013) has added guidance into IUID Verification/Validation. Again, all of these policies have given us a reason to write one document addressing IUID requirements from creation to disposal.

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### **III. CONOPS BUILD PROCEDURE**

#### **A. STAGE 1 – WRITING IUID IMPLEMENTATION PLANS**

According to Department of the Army (2016), the PSM to submit annual reviews and update the IUID Implementation Plan for their assigned products. To make this process easier, the Logistics Support Activity (LOGSA) has automated the IUID plan creation in a program called System Planning and Requirements Software (SYSPARS). SYSPARS asks a series of questions and the answers generate the IUID Implementation Plan, which can be saved as a word document. Best practice is to download a copy of SYSPARS every time you want to create a plan because of the periodic changes being made to the guidance (p. 5).

PSM are required to submit annual reviews and update IUID Implementation Plan. DOD, Army, Logistics Support Activity (LOGSA), Automated Movement and Identification Solution (AMIS) and PEOs have published regarding how the plans should be written and minimum content requirements (Department of the Army, 2016).

LOGSA has automated the IUID plan creation in a program called System Planning and Requirements Software (SYSPARS). SYSPARS asks a series of questions and the answers generate the IUID Implementation Plan, which can be saved as a word document. Best practice is to download a copy of SYSPARS every time you want to create a plan because of the periodic changes being made to the guidance.

#### **CREATION OF IUID IMPLEMENTATION PLAN**

Step 1. Download SYSPARS software and create an IUID implementation plan. SYSPARS link at: Department of the Army Logistics Support Activity (LOGSA) (2014) click on hyperlink to *SYSPARS* and download the program.

Step 2. Answer the IUID implementation plan questions.

Step 3. Export the completed plan as a Microsoft Word document and file save.

Step 4: Apply the changes described in the spreadsheet to the Microsoft Word version of the plan.

Step 5. Edit the plan adding any content you may want in it that SYSPARS did not auto-populate. SYSPARS just provides the “must have information.” Each plan can be tailored to meet the specific system.

Step 6. Coordinate the plan for comments and concurrence to:

Life Cycle Management Command IUID representative

AMIS

Any other organization that assists in the execution of the plan.

Step 7. Upon receipt of the concurrences and/or comments, make changes to the plan as necessary.

Step 8. Send the amended plan to LOGSA for comment/concurrence.

Step 9. After LOGSA’s response, make plan changes as appropriate and then route through your chain of command for required signatures.

When a copy signed by the Milestone Decision Authority (MDA) or Deputy Assistant Secretary of the Army (as appropriate to the system’s Acquisition Category (ACAT)) is received, forward a copy to LOGSA.

#### SAMPLE OF SYSPARS IUID IMPLEMENTATION PLAN

Imbedded is a sample of a SYSPARS IUID Implementation Plan that was created in Microsoft Word from the SYSPARS program. Additional information can be added to IUID Implementation Plan to make it read better for Original Equipment Manufacturer (OEM).

Table 1. Microsoft Word document generated from SYSPARS IUID implementation plan. Source: Department of the Army Logistics Support Activity (2014).

<b>PROGRAM SYSTEM NAME:</b>	<b>PROGRAM ELEMENT:</b>
<b>PROGRAM MANAGER:</b>	<b>PROGRAM EXECUTIVE OFFICER:</b>
<b>PROGRAM MANAGEMENT OFFICE:</b>	<b>PROGRAM EXECUTIVE OFFICE:</b>
<b>DATE OF PLAN:</b>	<b>ACAT:</b>
<b>POINT OF CONTACT:</b>	<b>POC EMAIL:</b>
<b>ALTERNATE POC:</b>	<b>ALTERNATE POC EMAIL:</b>
<b>COMMAND:</b>	

Table 2. IUID Coordination Block Source: Department of the Army Logistics Support Activity (2014).

Concur	Non-concur	Agency	Name (title, last name)	Phone	Date (YYYY/MM/DD)	Remarks
		LOGSA				
		PD AMIS				

Note: In addition to the core organizations such as LOGSA and PD AMIS, each organization that has a role in executing the plan. PEO CS&CSS require U.S. Army Tank-Automotive & Armament Command (TACOM) Integrated Logistics Support Center (ILSC) Coordination.

This document was created using the SYSPARS. For more information on SYSPARS visit the LOGSA website.

System Description:

Should include the following:

The XXX is a New Procurement System.

Briefly describe the functional and physical configuration of XXX.

Describe the mission of the XXX in terms of objectives and general capabilities.

Describe the life cycle phase emphasized in the planning effort - Engineering & Manufacturing Development.

References:

The DOD Guide to Uniquely Identifying Items (the “bible” of IUID):

Army Regulation 700–145, Item Unique Identification

<http://www.usarmyamis.army.mil/CustomerSupport/700-145.pdf>

Army Directive 2016–21, Interim SIM Management Policy

<http://www.usarmyamis.army.mil/CustomerSupport/iuid.html>

Military Standard 129R (Military Marking for Shipment and Storage)

[http://quicksearch.dla.mil/qsDocDetails.aspx?ident\\_number=35520](http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=35520)

Exemption and Approval Source:

Table 3. Exemptions after 2015. Source: Department of the Army Logistics Support Activity (2014).

<b>EXEMPTIONS FOR DECEMBER 31, 2010</b>
N/A
<b>LIST THE NSN OR PART NUMBER AND NOMENCLATURE OF EACH CLASS VII ITEM MEETING IUID CRITERIA THAT WILL BE COMPLETELY OUT OF THE DOD INVENTORY BY DECEMBER 31, 2010</b>
<b>(ONE PER LINE)</b>

Table 4. Exemptions after 2015. Source: Department of the Army Logistics Support Activity (2014).

<b>EXEMPTIONS FOR DECEMBER 31, 2015</b>
N/A
<b>LIST THE NSN OR PART NUMBER AND NOMENCLATURE OF ANY ITEMS OTHER THAN CLASS VII ITEMS MEETING IUID CRITERIA THAT IS BEING PHASED OUT OF INVENTORY BY DECEMBER 31, 2015</b>
<b>(ONE ITEM PER LINE)</b>

Implementation Strategy: Marking:

Current and Future Contracts: All active acquisition contracts/solicitations for tangible personal property include DFARS Clause 252.211-7003 (2016).

IUID Registry

Are you using the Office of the Deputy Secretary of Defense (Acquisition, Technology & Logistics (AT&L)) (V 2.5) (2012). *Assuring valuation, accountability and control of government property* (Department of Defense Guide to Uniquely Identifying Items) to ensure the UII is loaded into the IUID Registry? **Yes, this document has been provided to the Original Equipment Manufacturer (OEMs).**

Technical Documentation Strategy

Describe how IUID marking requirements will be integrated into drawings and manufacturing processes. Also, identify the organization(s) that will do that work.

**The marking requirements need to be integrated into the drawings and manufacturing process after the provisioning conferences, in which the items that require IUID marking will be determined. The items identified as requiring IUID will have a drawing, as a part of, or separate from the item's drawing, identifying**

**where the data plate will be mounted on the item and how it will be mounted. The determination for these requirements will be coordinated between the engineering representatives from the government and the item manufacturer.**

Will IUID marking requirements be integrated in DMWR or NMWR? **Yes.**

If so, will the process be incorporated into the Technical Manuals, or will it be specified separately in the scope of work? **Incorporated into the technical manuals.**

Who will verify the readability of the mark and that the IUID registry is populated correctly? Defense Contract Management Agency (DCMA) for contract completion, the depot government quality assurance representative for depot work.

#### 4.4 Property in Possession of Contractors (PIPC)

Based on DFARS 252.211-7007 Clause (2008), it is no longer mandatory to mark legacy Government Furnished Property (GFP) items in possession of contractors. The Supplementary Information in this section states that, “To avoid any confusion, the marking requirement has been excluded from the final rule” (para. c(1)).

Program Sustainment Strategy

Performance Based Logistics (PBL): How is IUID being used in PBL support?  
Contractor Logistics Support (CLS): How is IUID being used in CLS?

Quality Assurance

Describe the quality assurance process you will use to ensure that items are readable and that they are registered as planned. Following guidance provided by PEO policy memorandum paragraph 4 c. plan author should review and follow guidance and notes from enclosure 1 to define quality assurance in the IUID plan

IUID Related Actions to Improve or Enhance Business Processes

IUID will be used to improve program management of the system and/or its components by describing how IUID will be used to improve the program management of the system and/or its components.

Automatic Identification and Data Capture in Property Management and Maintenance:

What is your program doing to make use of automatic identification and data capture in property management and maintenance?

#### Metrics

Not applicable as the program has not yet reached the System Demonstration Phase / Design Readiness Review (the design is still unstable).

Milestone Goals to Measure Ongoing Progress in IUID of Legacy Qualifying Items:

Priorities for application of IUID and registration:

Priorities not applicable for new program initiation as UID will be applied to all required items.

#### Key Program Events

Identification of key events not applicable to programs initiating after UID program requirements established. UID will be applied to all required items as produced.

#### IUID Related Budget Information by Fiscal Year:

All costs for UID will be incorporated into end item and component costs. The high risk approach of budgeting UID separately will not be pursued.

This appendix A is part of IUID Implementation Plan and will address all the items that need to be marked. This must be part of plan.

Appendix A		PM POC: PM Phone:	Plans to use Virtual UIIs must be approved by ASA(ALT). Requests for ASA(ALT) approval will be coordinated with ASA(ALT) through the IUID Support Office before Virtual UIIs are used.									
Plan Name: Systems:												
End Item(s) of Which This Item (NNN) is a Component	Enterprise ID(s) of Orgs Assigning UIIs	Item's Original Part #	Item's NSN	Item's Nomenclature	Costs Greater than or Equal to \$5,000	DoD Serially Managed Item	Unique Item Traceability Required during any part of life cycle	Parent of a Serially Managed Embedded Item	Controlled Inventory (Classified, Sensitive or Pilferable)	Mission Essential	Designated for IUID by Requiring Activity	Unmarked LegacyItems
											Yes	No
											"X" if Virtual IUID Used	Item's Supply Class

Figure 6. IUID implementation plan appendix A. Source: Department of the Army Logistics Support Activity (2014).

Signature Page:

SUBMITTED:

Product Manager Name	
Title	
Signature/Date	

CONCURRED:

Project Manager Name	
Title	
Signature/Date	

APPROVED:

Program Executive Office Name		Other Delegated Program
Title		
Signature/Date		

Component/Service Acquisition Executive Name		ACAT 1C/1D Programs
Title		
Signature/Date		

Figure 7. Signature page

## B. STAGE 2 – DOCUMENT AND DETERMINATION OF HOW AND WHERE TO MARK EQUIPMENT

Markings on equipment can use Construct I or II. OEMs should seek PM assistance with constructing and marking equipment. DFARS Clause 252.211-7003 (2016) states the IUID construct is to be made by organization assigning the UII (para. ii (A)).

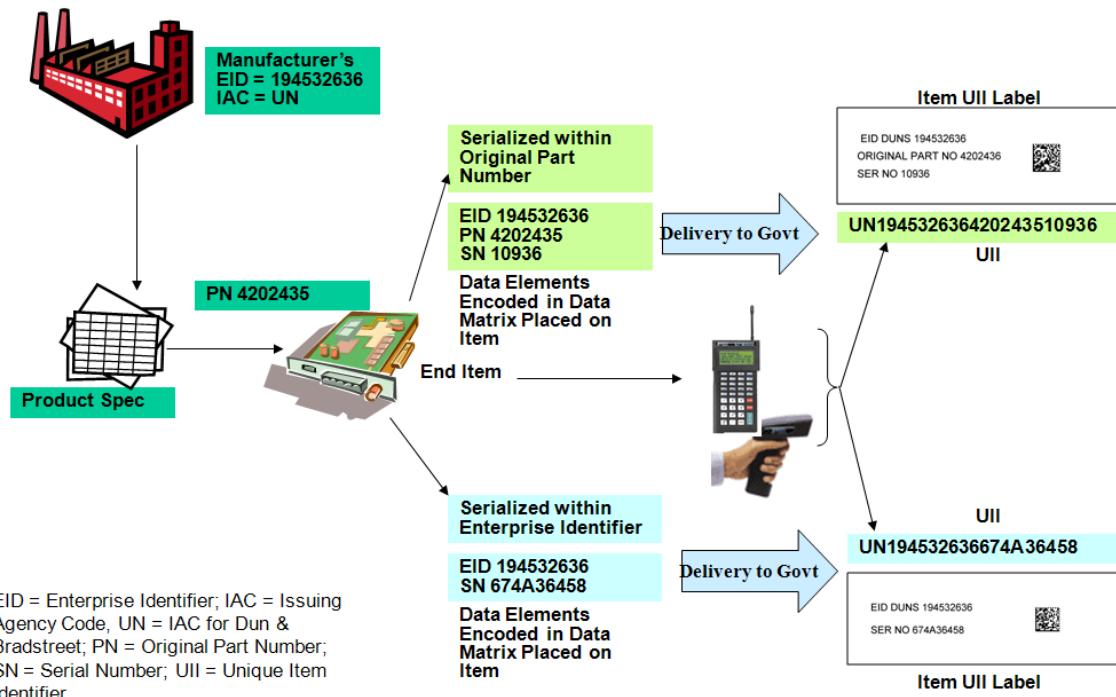


Figure 8. Data elements for IUID mark. Source: Office of the Deputy Secretary of Defense Acquisition, Technology & Logistics (2012).

### 1. Marking Equipment

According to Department of the Navy (2011), “DOD has minimum requirements of the UII mark: the mark must be readable throughout the life cycle of the equipment; withstand environmental conditions it will be exposed to under normal conditions; and does not negatively impact performance, reliability, and durability” (p. 1).

The following factors need to be considered:

- Function

- Available marking area
- Material type
- Color
- Hardness
- Surface roughness/finish
- Surface thickness
- Operating environment

## **2. Consideration of Placement of the Mark**

PMs should work closely with suppliers and depot to determine where to place the mark to ensure that it meets the DOD standards.

Consider:

- Using flat and protected area
- Should be able to access the mark easily

According to DFARS Clause 252.211-7003 (2016), “Parent item means the item assembly, intermediate component, or subassembly that has an embedded item with a unique item identifier or DOD recognized unique identification equivalent” (para. (a)).



Figure 9. Assault kitchen (parent) with Tray Ration Heater (sub-system)

### 3. Areas Not Recommended to Be Marked

- Areas or items that will be replaced during maintenance
- Over air intakes, windows, fasteners, vents, or seems
- Near high heat sources
- Over optics, lenses, or sensors
- Direct air streams of engines, helicopter rotors, and turbine blades, and so forth

### 4. Creating Marks Readable with a Scanner

- Simple techniques to follow:
    - Make the light part as white as possible and the dark parts as black as possible
- (Figure 10)

- Include Dimension
- Consider covering the mark with a coating to increase life of marking

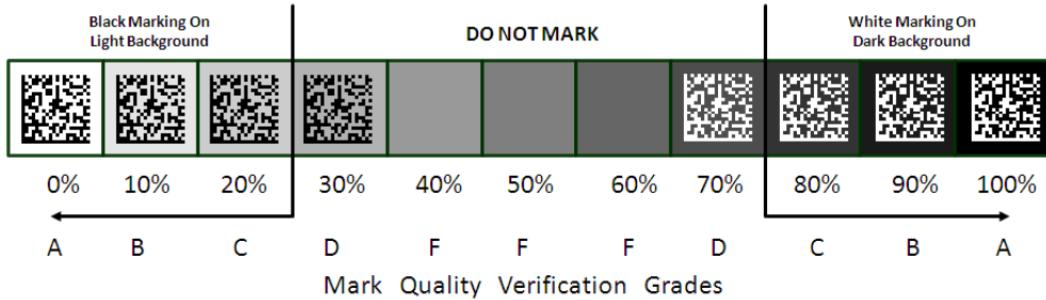


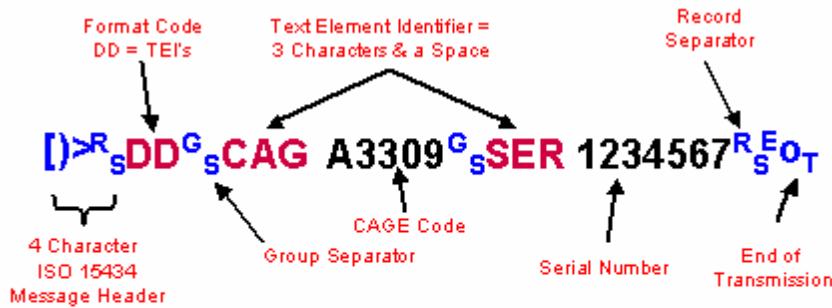
Figure 10. Mark quality verification grades. Source: Department of the Navy (2011).

IUID marking methods include laser, dot peen, direct ink, engraving, coating, and chemical etch just to name a few. See references for further guidance

## 5. Data Used to Create the Mark

Guidance for contracts tells PSM and logisticians to not dictate which construct is used... Two types of marks will be discussed according to Tips on encoding the unique item identifier (UII) mark and building the concatenated UII (2006):

Construct Type 1: Serial number is unique within the enterprise. Unique identifier data elements are linked together in order of the issuing agency code, enterprise identifier, and unique serial number within the enterprise identifier (p. 1).



**Note: This example uses construct #1 with Text Element Identifiers (TEI).**

Figure 11. Construct 1: Source: Tips on encoding the unique item identifier (UII) mark and building the concatenated UII (2006).

Construct Type 2: Serial number is unique within the original Personal Identification Number (PIN), lot or batch number that is unique within the enterprise. Unique identifier data elements are linked together in order of the issuing agency code; enterprise identifier; original PIN, lot, or batch number; and serial number within the original PIN, lot, or batch number (p. 8)

SAMPLE OF UNCONCATENATED (means showing characters that are required to ensure that a Smart Scanner will read the mark)

CONSTRUCT 2:

[]>(RS)06(GS)25SD81337AK-0100RSB-T06-2295(RS)(EOT)

81337 = CAGE

AK-0100 = part number

RSB-T06-1258 = serial number

**[]>R\_s06G\_s17V98897G\_s1P4L0014-163B G\_sSSA10197R\_sEoT**

Figure 12. Construct 2 with characters needed to create mark. Source: Tips on encoding the unique item identifier (UII) mark and building the concatenated UII (2006)

The UIDworks© program standard label is .020 guage thickness alluminum, unless specified in the email. Below are the UID Template designs available, custom designs are available upon request. (NOTE: figures not shown to scale)

**Metal Plate Design Templates:**



**Template "C":** Custom - Color, Design, and sizes determined by customer.

**Tesa Label Design Templates:**

Tesa label material is suitable for use as identification, barcode, inspection, inventory, or rating labels. Engraving takes place using a laser beam (Nd:YAG- or CO2-Laser). Tesa labels offer tamper evident peel and stick application for endless marking that requires durability, flexibility, and resistance to forgery.

**AMC Standard TESA Templates**



Figure 13. Templates for creation of marks.

Source: Department of the Army (n.d.-d).



Figure 14. More templates for creation of marks.

Source: Department of the Army (n.d.-d).

## 6. Samples of Data Plates

The following figures show samples of data plates.



Figure 15. Data plate with IUID: Source: Department of the Army (n.d.-d).



Figure 16. Data plate with human readable data

Marks are considered permanent and rarely need to be removed. Circumstances when you would retire a mark: if the mark is invalid or the label has been destroyed.

- Corrective Actions:
- Remark equipment with defective UID.
- Must destroy previous mark per below:



Figure 17. Retiring a mark. Source: Department of the Navy (2011).

## 7. Requesting Replacement Labels

Replacement labels are requested for labels that will not scan, are missing, or damaged. Letterkenny UID Works website provides guidance to PSM/Logistician on ordering replacement labels. See Appendix A.

## C. STAGE 3 – MARK ITEMS AND REGISTER PEDIGREE INFORMATION

Stage 3 of the process involves the process of ensuring the IUID is registered properly with the IUID database, ensuring the pedigree information is correct, and validating/verifying the physical IUID mark. This portion of the process is essential and if administered properly will ensure data integrity and save the PM time from not having to re-work equipment IUID. It is the PMs Responsibility to ensure that the mark is verified and in compliance. DCMA does not ensure the mark is in compliance. It is the PMs Responsibility to ensure that the mark is verified and in compliance (Krumhaus, 2017). DCMA does not ensure the mark is in compliance.

### 1. Marking Items and Registering Pedigree Information

Appendix B gives instruction on using Department of the Army (n.d.-f), which will create and register the mark in the DOD registry, and print a label to mark systems.

### 2. Validation/Verification of IUID Mark

Department of the Army (2016) “requires OEMs to provide DI-MGMT-81804A, IUID Marking Activity, Validation and Verification Report” (p. 9).

Clarification: Validation shows that the IUID mark is encoded/formatted in correct manner. Verification shows that the physical properties of mark are of a good quality. Acceptable marks passing grades (B or above).

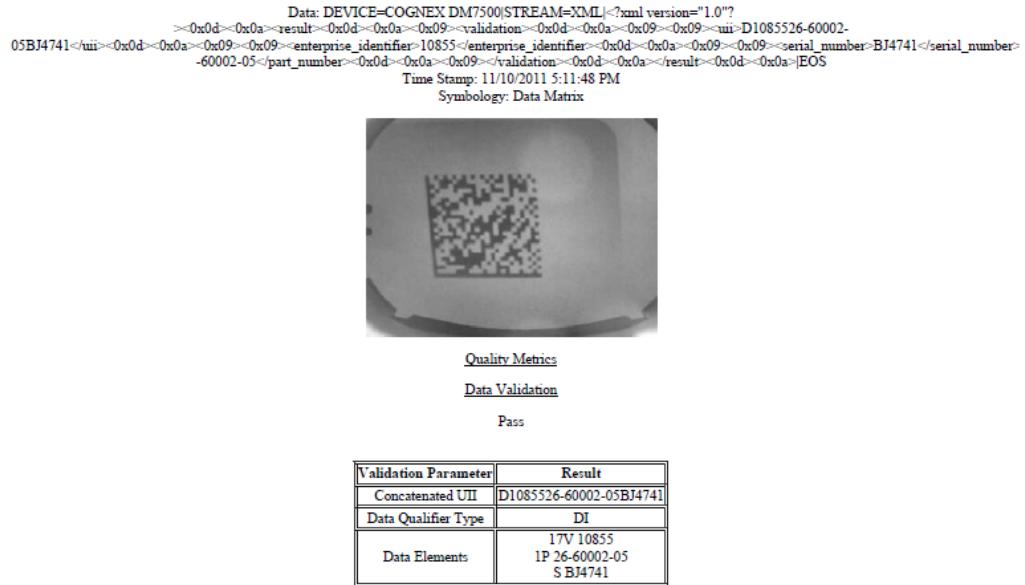


Figure 18. Data validation pass

**Verification / Validation Report****Serial number:** C91101255**Time Stamp:** 3/15/2013 11:47:56 AM**Result Data:** Validation Failure17V 30554<0x0d>1P MEP-1070<0x0d>S F120359916  
<0x0d>**Overall:** FAIL**Data Validation:** FAIL**Specification:** DoD UID Validation**Image:****Details:**

Validation Parameter	Result
Error Position	0
Error Code	9
Error	not ISO15434 Compliant

Figure 19. Data validation fail

**D. STAGE 4 – IUID BUSINESS PROCESS INVOLVES INTEGRATION OF AUTOMATION**

The Army is transitioning to multiple Accountable Property System of Record (APSRs) at the same time that they are implementing IUID. Although the end state promises to be more effective and efficient, the convergence is causing complications and undesired effects on material fielding and IUID compliance.

There are many bits of conflicting guidance on how and in what APSR to place certain property. As a general rule—and this does not apply to all PEOs because of location and association with their local Garrison Command—property can be subdivided into two main categories: property not intended to be fielded and property to be fielded.

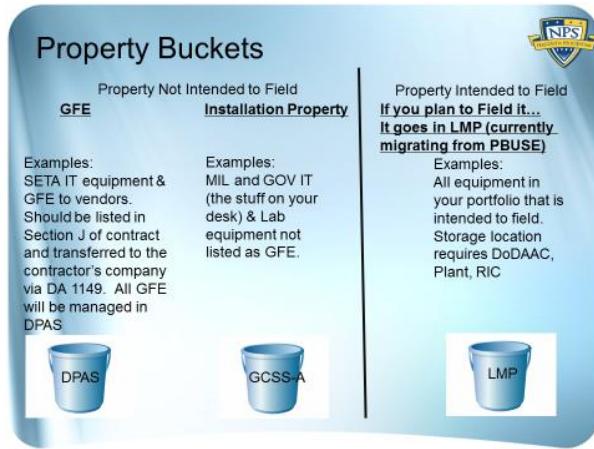


Figure 20. Property buckets. Source: Department of Defense (n.d.).

## 1. Property Not Intended to Be Fielded

This category of property has many guidance conflicts that are still being identified and worked out at the time of this writing. As a general rule, Government Furnished Equipment (GFE) will be managed in DPAS and installation property, such as workforce information technology (IT) equipment including laptops, monitors, projectors, test equipment, government lab equipment will be managed on GCSS-Army hand receipts for accountability (Shyu, 2014). Again, this is not applied universally across ASA(ALT), and in many cases, there are PMs within PEOs managing property differently because of the turmoil in migrating multiple Accountable Property System of Records (APSR) at once and conflicting guidance (or in some cases, lack of any clear guidance).

## 2. Property Intended to Be Fielded

In this category, PEOs are in the middle of migrating from fielding via Property Book Unit Supply Enhanced (PBUSE) to fielding by the (still in development) LMP Fielding module. In this context, all property that is intended to be fielded is being migrated to LMP and placed into PM Project Codes for accountability. For the purposes of this document and IUID processes, we will discuss the procedures for four property APSRs. The Army fielding process and thus the IUID processes are disharmonious now, and currently, property is spread across all four of these APSRs.

### **3. Defense Property Accountability System (DPAS)**

Shyu (2014) directs PEOs to place “all non-fielded property, class VII major end items or class II non-expendable material that is not intended for unit fielding” into DPAS for accountability. PEOs are typically tenants of post Garrisons. Policy is conflicting regarding what equipment will be uploaded in DPAS versus LMP.

DPAS is a DOD property management system. It is the APSR for over 32 DOD agencies and military services. DPAS contains three modules, Property Accountability, Maintenance & Utilization and Warehouse Management. This program is administered by the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics (OUSD[AT&L]). DPAS is an approved APSR and in the context of this document, it interfaces with the IUID Registry and Wide Area Workflow (WAWF).

Use Appendix D for IUID process using the DPAS. For more information, please see the DPAS website at <https://app.dpas.dod.mil/>.

### **4. Global Support System-Army (GCSS-A)**

Northrup Grumman (2016) states

that GCSS-A will ultimately replace several aging and outdated Army management information systems across tactical logistics environments within the Army’s Active and Reserve components as well as the National Guard. A state-of-the-art, web-based, logistics and finance system based upon commercial best business practices and off-the-shelf (System Application Product (SAP)) software, GCSS-Army will serve as an automated combat enabler for soldiers. Integrated with DOD financial systems, it provides highly accurate cost management and financial visibility for tactical materiel and sustainment. A full deployment decision was granted in December 2012 for Wave 1 of the GCSS-Army solution. To date, 281 warehouses were converted completing (para. 1).

For more information, please see the official website for GCSS-A is <http://gcss.army.mil>.

### **5. Property Book Unit Supply Enhanced (PBUSE)**

As of this writing, PBUSE will sunset on 31 December 2017 (Executive Order No. 070–16, 2015). However, the Army is lagging behind in LMP implementation for

Total Package Fielding so that date has the possibility of slipping. PMs utilize PBUSE for equipment handoff to tactical units by creating the transaction in PBUSE, downloading into an xml format, then sending to the unit to upload via GCSS-Army. This is a workaround process and is not very efficient. It does not provide the PM with visibility when the document number has been accepted into GCSS-A.

Appendix C describes using PBUSE to field PM owned assets and Appendix F using Warfighter Information & Support Exchange (WISE) in conjunction with PBUSE to field PM owned assets. WISE is a tool developed by PEO C3T to assist in uploading UII data into PBUSE due to the gap in automation. Go to the official PBUSE website at <https://pbuse.army.mil/>

## **6. Logistics Modernization Program (LMP)**

Not technically an APSR as of this writing but Army guidance is to migrate all fielding and PM owned stock intended to field to LMP. According to Department of the Army PEO Enterprise Information Systems (PEO EIS) (n.d.),

The LMP is an Enterprise Resource Planning (ERP) System that builds, sustains, and generates warfighting capabilities using one of the largest, fully-integrated supply chain and maintenance, repair, and overhaul solutions in the world. In all, the LMP sustains, monitors, measures, and improves the National-level logistics Production baseline, delivers new and expanded capabilities, and supports DOD and ERP integration efforts. LMP support is critical to the Army achieving an integrated enterprise solution that enables materiel readiness and provides asset management and accountability, architecture, and acquisition compliancy. LMP is deployed to more than 50 locations around the world with approximately 30,000 users throughout the Army and AMC, and related major subordinate commands, depots, and arsenals, as well as the Defense Finance and Accounting Service and U.S. Special Operations Command. With the completion of the LMP Increment 2 in 2016, the system now supports shop floor automation, automatic identification technology, expanded ammunition requirements, strategic Army business transformation goals and specific DOD directives, such as item unique identification.

Several areas have been flagged and need to be resolved prior to going live!

## Total Package Fielding High Level Process

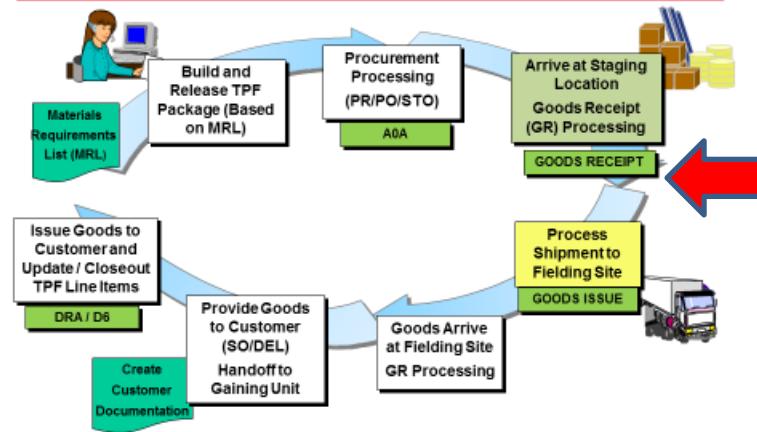


Figure 21. High-level process flow for fielding assets using LMP.

Source: Department of the Army PEO Enterprise Information Systems (PEO EIS) (n.d.)

The red arrow indicates where scanning of IUID can be implemented into LMP.

## LMP Procurement Processes

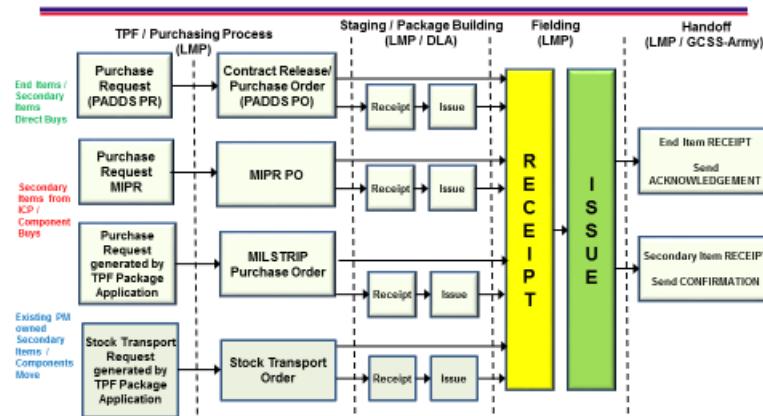


Figure 22. LMP procurement processes. Source:  
Department of the Army PEO Enterprise Information Systems (PEO EIS) (n.d.).

LMP does not accommodate all PMs because not everyone is using Procurement Automated Data Documentation System (PADDS) as a contracting system. ASA(ALT) is

working on a pilot to see how PMs can implement LMP into fielding processes. One of the work arounds will be manual input into LMP after the asset comes from production. This would be the same time to add the serial number and IUID data. Caution when adding manual input into systems because of the possibility of keying mistakes. Pilots have demonstrated that LMP needs modifications before the module will be ready for use for fielding of equipment. For more information, please see the LMP website at <https://www.lmp.army.mil>.

## **7. Automated Information Tool (AIT) Devices**

Utilizing a scanner is paramount to accomplishing UID tasks. The Army does not currently have an operational AIT device. PEO CS&CSS has validated and is currently the IDI Smart-Scanner in UID processes. The Smart Scanner detailed description of this scanner is: IDI Smart Scanner CR3500, P/N SYSCIDI-S35B2K, 3900 mAHB2 handle allows batch-mode scanning. JavaScript & Optical character reader licenses, Full IDI Smart-Scan app suite including UID data validation, parsing, and UI output, 6-ft USB cable, 2-yr premium 4-yr warranty, battery & charger Code (Code Corporation, 2009). Shipping charges included in pricing \$1,580.00. Contractor is ID Integration from Mukilteo, WA.



Figure 23. Scanner, IDI Smart-Scan

Due to lack of consistent Army guidance, many organizations are trying to use Cognex “Dumb” scanner; tethered to computer, which is an ineffective process. “Dumb” scanners are hard to use when scanning. A “Dumb” scanner only collects the raw data and puts it into a word/excel/notepad file. In our analysis, this is not an effective method, we recommend utilizing a Smart Scanner that has a certificate of noteworthiness such as IDI scanner.

See Appendix E - Smart scanner process.

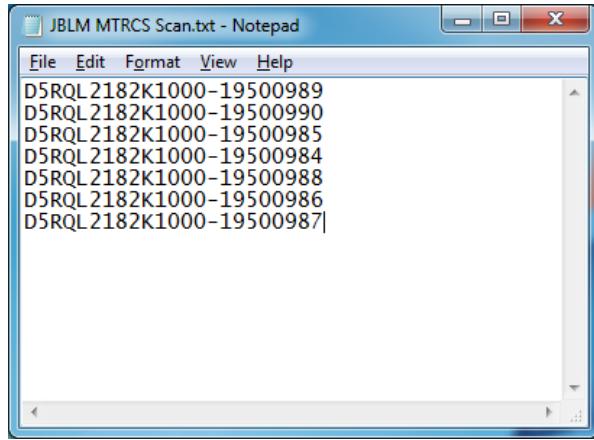


Figure 24. Smart scan good IUID

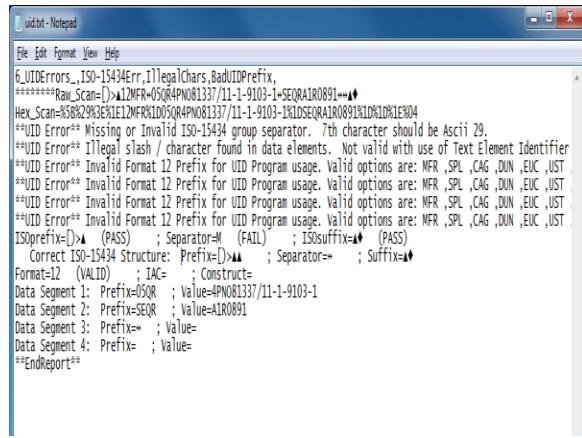


Figure 25. Smart scan bad IUID mark

Figure 24 shows what IUID data looks like using a SMART scan with valid IUID marks. Figure 25 is a SMART scan of an invalid IUID mark, which needs to be corrected.

## **8. Inventory and Warehousing**

PEO CS&CSS author documented a 50 percent savings in inventorying a warehouse using the smart scanner. Manual inventory was time-consuming, and human errors happened with manual keying of data that did not meet mission requirements. Correct IUID utilizing a smart scanner will provide near 100 percent accuracy. This resulted in a substantial cost avoidance for the PEO.



Figure 26. Assets in a warehouse scanned using smart scanner

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## **IV. CONCLUSIONS AND RECOMMENDATIONS**

The Army is in a state of massive change in automated property accountability systems and in the way we audit and track equipment. This guide is a “living document” and providing a one-stop shop for PMs to perform their IUID requirements. In its current state, the Army has scattered and fragmented guidance and policy on how to implement IUID requirements. This guide aims to pull all relevant information together in a concise document and provide processes for navigation through the various APSRs.

Our analysis clearly shows that the Army is not synchronized in its development and use of its four directed property accountability APSRs (PBUSE, GCSS-A, DPAS, and LMP). We recommend that ASA(ALT) either migrates to the use of a single property accountability APSR or establishes a single integrator to ensure that the processes and data flow is consistent and useable across the four existing APSRs. Without the use of this guide and the “work arounds” identified, it is currently nearly impossible and highly inefficient for PMs to comply with IUID requirements.

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## APPENDIX A. ORDERING IUID COMPLIANT LABELS

This appendix provides a process for PMs to be able to create IUID labels. Letterkenny Army Depot has set up a website to facilitate this process. Our analysis has shown this to be the easiest and most effective way for PMs to create IUID labels for their equipment.

Go to <http://www.letterkenny.army.mil/UIDworks/howto.html>.

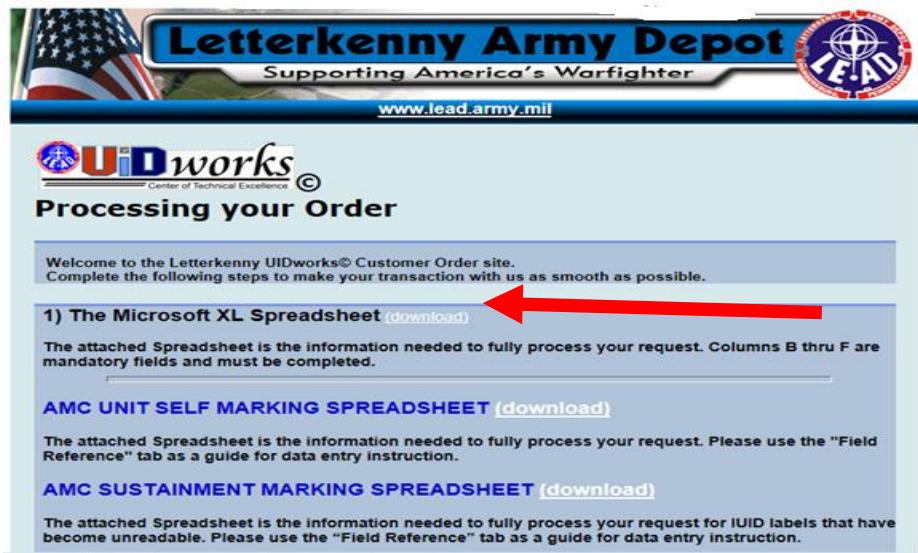


Figure 27. Spreadsheet to download. Source: Department of the Army (n.d.-d).

**3) UIDworks© Supplemental Order Form in Fillable PDF [here](#)**

Fill out form for each order you place with UIDworks©, when finished save it to your harddrive to email it to us when your order is complete. This form requires Adobe Reader, if you do not have Adobe Reader you can download it free from Adobe free for anyone [here](#)

**4) Order Submittal/Payment**

After completing the above items, email them and a PDF file of your custom plate design (if applicable) to [usarmy\\_lead\\_usamc\\_mbx\\_uidworksead@mail.mil](mailto:usarmy_lead_usamc_mbx_uidworksead@mail.mil) include any special instructions you may have regarding your order. Include your Name, Date and Order Number in the subject line of the email.

[Email MIPR payment information](#) Include your name, date, and Order Number in the subject line of the Email.

**Contact Information**

For further questions or to speak with a UIDworks© representative directly contact:

**Special Projects Branch Supervisor**  
email: [usarmy\\_lead\\_usamc\\_mbx\\_uidworksead@mail.mil](mailto:usarmy_lead_usamc_mbx_uidworksead@mail.mil)  
DSN: 570-9552  
Work: (717)267-9552

**Special Projects Branch Leader**  
email: [usarmy\\_lead\\_usamc\\_mbx\\_uidworksead@mail.mil](mailto:usarmy_lead_usamc_mbx_uidworksead@mail.mil)

Figure 28. Download Supplemental Order Form.  
Source: Department of the Army (n.d.-d).

Click on UIDworks Supplemental Order Form in Fillable PDF (here). Open the Microsoft fillable and file save as

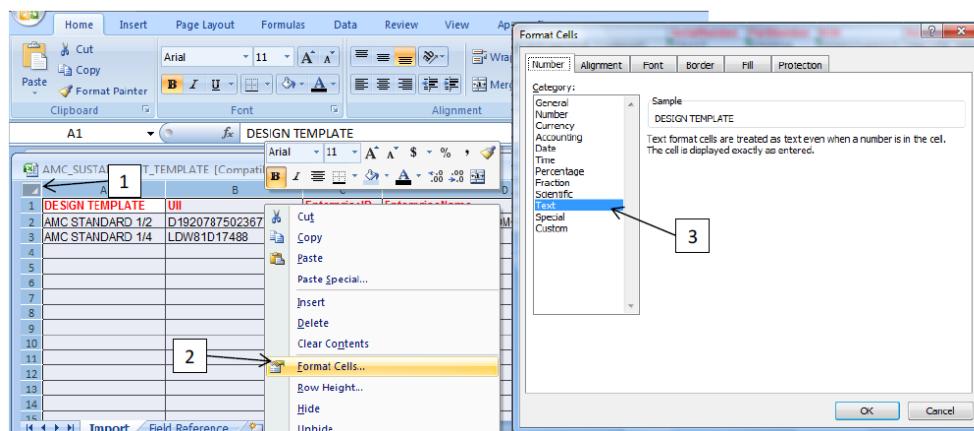


Figure 29. Spreadsheet for ordering labels. Source:  
Department of the Army (n.d.-d).

A11	X	✓	fx							
A	B	C	D	E	F	G	H	I	J	K
1 DESIGN TEMPLATE	EnterpriseID	EnterpriseName	PartNumber	Description	SerialNumber	NIIN OR NSN	COMMAND	TYPE PROGRAM	Bagged	BatchLot
2										
3										
4										
5										
6										

Figure 30. Data required for ordering labels.

Source: Department of the Army (n.d.-d).

Here is the spreadsheet. The mandatory fields are in red:

- Column A - design template is the IUID label size required. Examples:  $\frac{1}{4}$ " is used for standard size. Other size is  $\frac{1}{2}$ "
- Column B – is EnterpriseID – 5-character identification alpha-numeric typically CAGE or DODAAC (i.e., W52H09)
- Column C – EnterpriseName – Name of the Enterprise identified above without abbreviations (use uppercase)
- Column D – PartNumber – off of the data plate of the item
- Column E – Description of the item off of the data plate
- Column F – Serial number (no spaces)
- Column G – NSN or NIIN
- Column H – Command (requesting the mark)
- Column I – Type of Program
- Column L – AMC SUSTAINMENT MARKING (needs to be in every row)

Department of the Army (n.d.-d)

Download and complete the Supplemental Order Form.

## **UID Works Supplemental Order Form**

The form consists of several sections:

- Label Quantity:** A dropdown menu with a blue border. An arrow points from a box labeled "1" to the right edge of this field.
- Adhesive ?:** A row of four checkboxes: "No", "Basic", "High Temp Tolerant", and "CARC Compatible".
- Shipping Information:** A group of five input fields:
  - Name: A single-line text input.
  - Address 1: A multi-line text input.
  - Address 2: A multi-line text input.
  - City: A single-line text input.
  - State: A single-line text input followed by a Zip code input.An arrow points from a box labeled "2" to the right edge of the Address 1 field.
- Shipping Method:** A row of three checkboxes: "USPS Express", "FEDEX 2nd Day", and "FEDEX Overnight".

Figure 31. Sample of supplemental order form.

Source: Department of the Army (n.d.-d).

Put total labels being order and shipping information, as shown below.

Email both the Microsoft Excel spreadsheet and the Order Form to usarmy.lead.usamc.mbx.uidworkslead@mail.mil.

Note: Replacement labels are already registered in the DOD registry. Appendix B gives a systematic process to verify the mark is registered.

## APPENDIX B. USING TAMMS-A/MCDS TO VERIFY IUID MARKS ARE IN THE REGISTRY

This appendix describes the processes that PMs should follow to verify their IUID marks in TAMMS-A/MCDS. This process also provides PMs with the ability to upload data via xml file and create, print, and register marks.

Link to Department of the Army (n.d.-f) is <https://tamms-a.redstone.army.mil/>.

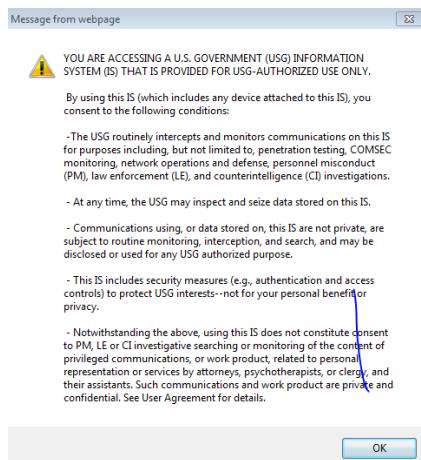


Figure 32. Login to TAMMS-A/MCDS (Click OK). Source: Department of the Army (n.d.-f).

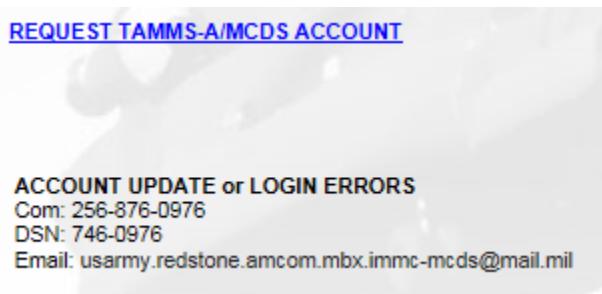


Figure 33. How to request TAMMS-A/MCDS account. Source: Department of the Army (n.d.-f).

Note: Here's how to request an account and help desk phone number and email. Redstone POC will ask you if you are generating IUID data and if so you will need to

provide additional information to ensure the IUID can be registered. Information such as DODAAC and CAGE information for supplier.

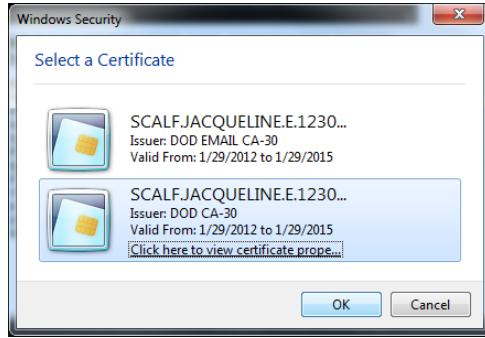


Figure 34. Click on CAC and OK. Source: Department of the Army (n.d.-f).

### Home – Apps – Account Management – Support

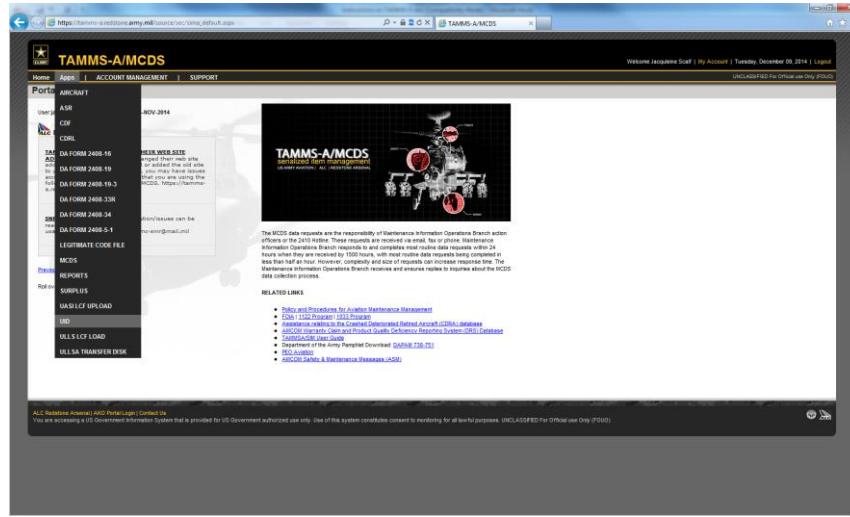


Figure 35. Click on App and Find UID Source: Department of the Army (n.d.-f).

### Choice Apps – UID



Figure 36. Screen to input serial number or UII or PN. Source: Department of the Army (n.d.-f).

Click on search

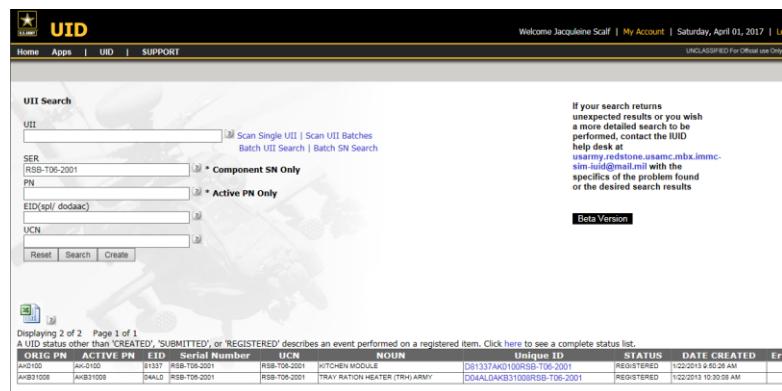


Figure 37. Shows item is registered in the registry. Source: Department of the Army (n.d.-f).

Click on search and you will see the UII information. If the UII is registered in the registry. If not registered need have the OEM register the mark.

NEXT will be screen shots on how to download a csv file to create, upload to the registry, and printer IUID marks.

Click on UID and move curser to UID Worksheet.

The screenshot shows the 'UID Worksheet' page. At the top, there are navigation links: Home, Apps, UID, SUPPORT, Welcome Jacqueline Scaf, Saturday, April 1, and UNCLASSIFIED. On the left, there's a sidebar with 'User Level' set to 'by AKO' and 'Sort Direction' set to 'ASC'. Below this is a 'Worksheet Name' input field with a dropdown arrow. To the right of the input field are buttons for 'Create UID', 'Lifecycle', and 'Rollover'. Further down are buttons for 'Delete UID' and 'Delete Item'. A section titled 'Export Selected Items:' contains radio buttons for 'BARTENDER CSV', 'BARTENDER TEXT', 'TEXT', 'CSV', 'XLS', and 'XLSX', with 'BARTENDER CSV' selected. There are also 'Print UID' and 'Register UID' buttons. A 'Save your selection' button is located at the bottom right of this section. At the bottom left, there's a 'Sort By' section with radio buttons for 'Default is SN' and '1st Level' (with options for MODEL, PN, SN, NOMENCLATURE, UIC, Status, NSN, UCN, OTHER). Buttons for 'Apply Sort', 'Add Sort Level 2', and 'Remove All Sorts' are also present.

Figure 38. Screen for creating and uploading UID. Source: Department of the Army (n.d.-f).

This screenshot is identical to Figure 38, showing the 'UID Worksheet' interface. The main difference is that the 'PN/SN Template' link under the 'Click on the icons below to download the appropriate CSV worksheet.' section is highlighted with a red box.

Figure 39. Click on PN/SN Template. Source: Department of the Army (n.d -f).

File Save as (caution be sure it stays a .csv file)

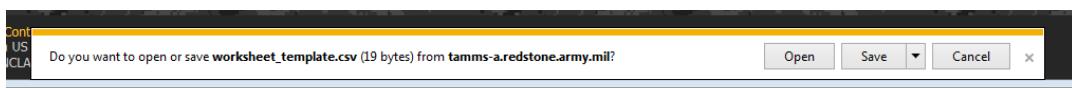


Figure 40. Click file save as

PN	SN	NSN	UCN	OTHER
121122 12-1000		1.23401E+12		
4				
5				
6				

Figure 41. CSV file to input data. Source: Department of the Army (n.d.-f).

Input Part Number (PN), Serial Number (SN), and National Stock Number (NSN).

Yes, the NSN will convert. Do NOT change this format. Note: in the function line of excel it shows the NSN.

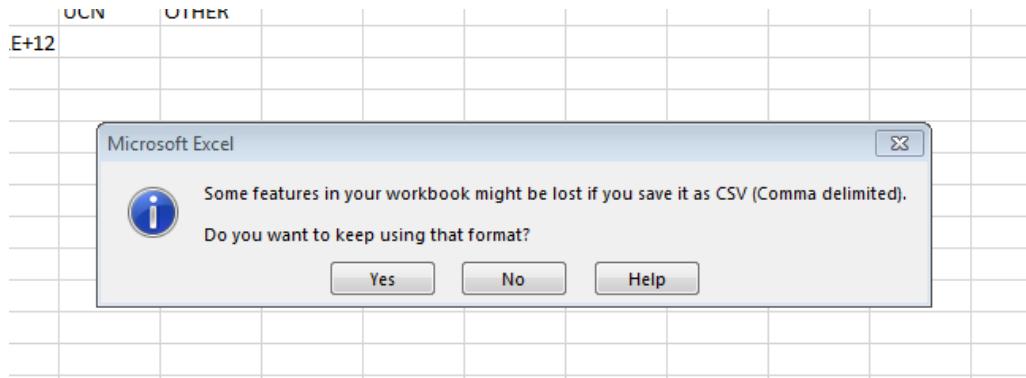


Figure 42. Click on yes

File save as and yes, you want to keep the format.

The screenshot shows the 'UID Worksheet' page. At the top, there are navigation links for Home, Apps, UID, and SUPPORT, along with a welcome message for Jacqueline Scalf and the date Saturday, April 01, 2017. A 'UNCLASSIFIED For Official Use Only' stamp is visible. The main area contains fields for 'User Level' (By UIC or By AKO) and 'Sort Direction' (ASC or DESC). A 'Worksheet Name' dropdown menu is open. Below these are download links for 'PN/SN Template' and 'UII Template', each with a 'Browse...' and 'Upload' button. To the right, there are buttons for 'Create UID', 'Lifecycle', 'Rollover', 'Delete UID', and 'Delete Item'. An 'Export Selected Items' section offers options for 'BARTENDER CSV', 'BARTENDER TEXT', 'TEXT', 'CSV', 'XLS', and 'XLSX'. A 'Print UID' link is also present. On the far right, there's a 'Register UID' section with checkboxes for 'Automatically delete registered items' and 'Do Not Automatically delete registered items', with a 'Save your selection' button.

Figure 43. Click on browse and find the .csv file. Source: Department of the Army (n.d.-f).

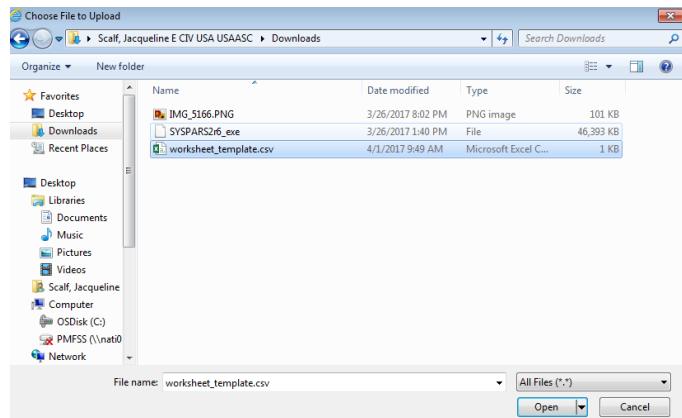


Figure 44. Find the file

UID Worksheet

User Level:  By UIC  by AKO

Sort Direction:  ASC  DESC

Worksheet Name: WORKSHEET\_TEMPLATE-28MAR17\_20170410193509.CSV

Click on the icons below to download the appropriate CSV worksheet.

PN/SN Template UII Template

BROWSE... UPLOAD

Export Selected Items:

BARTENDER CSV  BARTENDER TEXT  TEXT  CSV  XLS  XLSX

Print UID

Register UID:  Automatically delete registered items.  Do Not Automatically delete registered items.  Save your selection

Sort By: (Default is SN)

1st Level:  MODEL  PN  SN  NOMENCLATURE  UII  Status  NSN  UCN  OTHER

Apply Sort  Add Sort Level 2  Remove All Sorts

Figure 45. Upload the file. Source: Department of the Army (n.d.-f).

UID Worksheet

User Level:  By UIC  by AKO

Sort Direction:  ASC  DESC

Worksheet Name: WORKSHEET\_TEMPLATE-28MAR17\_20170410193509.CSV

Click on the icons below to download the appropriate CSV worksheet.

PN/SN Template UII Template

BROWSE... UPLOAD

Export Selected Items:

BARTENDER CSV  BARTENDER TEXT  TEXT  CSV  XLS  XLSX

Print UID

Register UID:  Automatically delete registered items.  Do Not Automatically delete registered items.  Save your selection

Sort By: (Default is SN)

1st Level:  MODEL  PN  SN  NOMENCLATURE  UII  Status  NSN  UCN  OTHER

Displaying 9 of 9

	MODEL	PN	SN	NOMEN	UII	STATUS	NSN	UCN	OTHER	ADD MARKS
<input type="checkbox"/>	AK-0100	RSB-T05-2197	KITCHEN MODULE	NOT CREATED	7380015583100					
<input type="checkbox"/>	AK-0100	RSB-T05-2198	KITCHEN MODULE	NOT CREATED	7380015583100					
<input type="checkbox"/>	AK-0100	RSB-T05-2576	KITCHEN MODULE	NOT CREATED	7380015583100					
<input type="checkbox"/>	AK-0100	RSB-T05-2598	KITCHEN MODULE	NOT CREATED	7380015583100					
<input type="checkbox"/>	AK-0100	RSB-T05-2599	KITCHEN MODULE	NOT CREATED	7380015583100					
<input type="checkbox"/>	AK-0100	RSB-T05-2621	KITCHEN MODULE	NOT CREATED	7380015583100					
<input type="checkbox"/>	AK-0100	RSB-T05-2732	KITCHEN MODULE	NOT CREATED	7380015583100					

Figure 46. Verify data then click the box by model to highlight all the lines and create UID. Source: Department of the Army (n.d.-f).

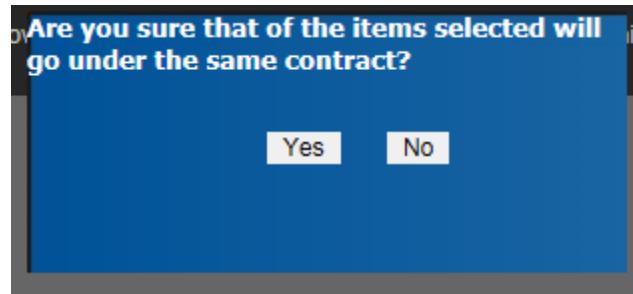


Figure 47. Next screen to click yes

Contract data was uploaded by TAMMS-D when the account was set up



Figure 48. Verify data is accurate and click next. Source: Department of the Army (n.d.-f)

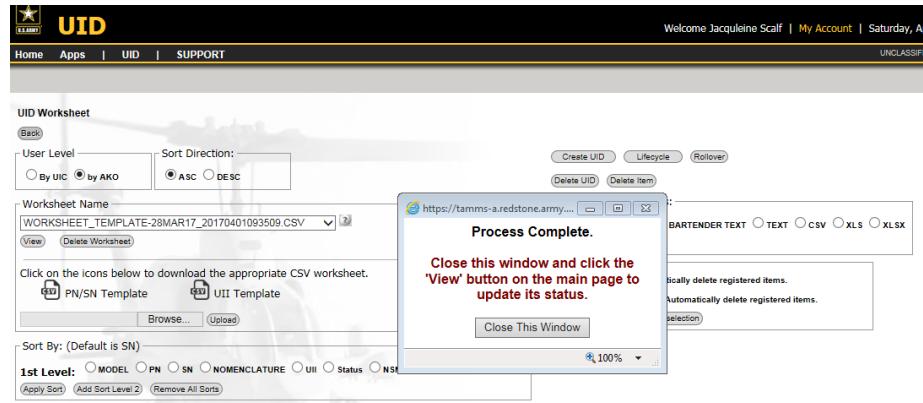


Figure 49. Process complete click close the window. Source: Department of the Army (n.d.-f).

User Level	Sort Direction:	<input type="radio"/> By IIC <input checked="" type="radio"/> by AKO	<input checked="" type="radio"/> ASC <input type="radio"/> DESC	<input type="button" value="Create UID"/> <input type="button" value="Lifecycle"/> <input type="button" value="Rollover"/>					
Worksheet Name		<input type="button" value="WORKSHEET_TEMPLATE-28MAR17_20170401093509.CSV"/> <input type="button" value="?"/>		<input type="button" value="Delete UID"/> <input type="button" value="Delete Item"/>					
Click on the icons below to download the appropriate CSV worksheet.		<input type="button" value="PN/SN Template"/> <input type="button" value="UII Template"/>		<input type="button" value="Export Selected Items:"/> <input type="radio"/> BARTENDER CSV <input type="radio"/> BARTENDER TEXT <input type="radio"/> TEXT <input type="radio"/> CSV <input type="radio"/> XLS <input type="radio"/> XLSX <input type="button" value="Print UID"/>					
Browse... <input type="button" value="Upload"/>				<input type="checkbox"/> Register UID <input type="radio"/> Automatically delete registered items. <input checked="" type="radio"/> Do Not Automatically delete registered items. <input type="button" value="Save your selection"/>					
Sort By: (Default is SN)									
1st Level:	<input type="radio"/> MODEL <input type="radio"/> PN <input type="radio"/> SN <input type="radio"/> NOMENCLATURE <input type="radio"/> UII <input type="radio"/> Status <input type="radio"/> NSN <input type="radio"/> UCN <input type="radio"/> OTHER								
<input type="button" value="Apply Sort"/> <input type="button" value="Add Sort Level 2"/> <input type="button" value="Remove All Sorts"/>									
Displaying 9 of 9									
■ MODEL	PN	SN	NOMEN	UII	STATUS	NSN	UCN	OTHER	ADD MARKS
<input type="checkbox"/>	AK-0100	RSB-T06-2197	KITCHEN MODULE	D81337AK-0100RSB-T06-2197	CREATED	7360015583100			
<input type="checkbox"/>	AK-0100	RSB-T06-2198	KITCHEN MODULE	D81337AK-0100RSB-T06-2198	CREATED	7360015583100			
<input type="checkbox"/>	AK-0100	RSB-T06-2576	KITCHEN MODULE	D81337AK-0100RSB-T06-2576	CREATED	7360015583100			
<input type="checkbox"/>	AK-0100	RSB-T06-2586	KITCHEN MODULE	D81337AK-0100RSB-T06-2586	CREATED	7360015583100			
<input type="checkbox"/>	AK-0100	RSB-T06-2589	KITCHEN MODULE	D81337AK-0100RSB-T06-2589	CREATED	7360015583100			
<input type="checkbox"/>	AK-0100	RSB-T06-2621	KITCHEN MODULE	D81337AK-0100RSB-T06-2621	CREATED	7360015583100			
<input type="checkbox"/>	AK-0100	RSB-T06-2732	KITCHEN MODULE	D81337AK-0100RSB-T06-2732	CREATED	7360015583100			

Figure 50. View displays the created UIIs. Source: Department of the Army (n.d.-f)

Displaying 9 of 9	<input type="checkbox"/>	MODEL	PN	SN	NOMEN	UII	STATUS	NSN	UCN	OTHER	ADD MARKS
	<input checked="" type="checkbox"/>	AK-0100	RSB-T06-2197	KITCHEN MODULE	D81337AK-0100RSB-T06-2197	CREATED	7360015583100				
	<input checked="" type="checkbox"/>	AK-0100	RSB-T06-2198	KITCHEN MODULE	D81337AK-0100RSB-T06-2198	CREATED	7360015583100				
	<input checked="" type="checkbox"/>	AK-0100	RSB-T06-2576	KITCHEN MODULE	D81337AK-0100RSB-T06-2576	CREATED	7360015583100				
	<input checked="" type="checkbox"/>	AK-0100	RSB-T06-2586	KITCHEN MODULE	D81337AK-0100RSB-T06-2586	CREATED	7360015583100				
	<input checked="" type="checkbox"/>	AK-0100	RSB-T06-2589	KITCHEN MODULE	D81337AK-0100RSB-T06-2589	CREATED	7360015583100				
	<input checked="" type="checkbox"/>	AK-0100	RSB-T06-2621	KITCHEN MODULE	D81337AK-0100RSB-T06-2621	CREATED	7360015583100				
	<input checked="" type="checkbox"/>	AK-0100	RSB-T06-2732	KITCHEN MODULE	D81337AK-0100RSB-T06-2732	CREATED	7360015583100				
Add	<input type="checkbox"/>	AK-0100					7360015583100				

Figure 51. Click into display to highlight. Source: Department of the Army (n.d.-f).

View <input type="button" value="Delete Worksheet"/>	<input type="checkbox"/> BARTENDER CSV <input type="checkbox"/> BARTENDER TEXT <input type="checkbox"/> TEXT <input type="checkbox"/> CSV <input type="checkbox"/> XLS <input type="checkbox"/> XLSX <input type="button" value="Print UID"/>
Click on the icons below to download the appropriate CSV worksheet.	<input type="button" value="PN/SN Template"/> <input type="button" value="UII Template"/>
Browse... <input type="button" value="Upload"/>	<input type="checkbox"/> Register UID <input type="radio"/> Automatically delete registered items. <input checked="" type="radio"/> Do Not Automatically delete registered items. <input type="button" value="Save your selection"/>
Sort By: (Default is SN)	
1st Level:	<input type="radio"/> MODEL <input type="radio"/> PN <input type="radio"/> SN <input type="radio"/> NOMENCLATURE <input type="radio"/> UII <input type="radio"/> Status <input type="radio"/> NSN <input type="radio"/> UCN <input type="radio"/> OTHER
<input type="button" value="Apply Sort"/> <input type="button" value="Add Sort Level 2"/> <input type="button" value="Remove All Sorts"/>	

Figure 52. Click register UID. Source: Department of the Army (n.d.-f).

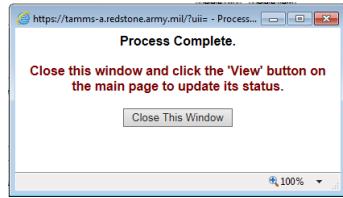


Figure 53. Click on close the window

MODEL	PN	SN	NOMEN	UII	STATUS	NSN	UCN	OTHER	ADD MARKS
AK-0100	RSB-T06-2197		KITCHEN MODULE	D81337AK-0100RSB-T06-2197	SUBMITTED	7360015583100			
AK-0100	RSB-T06-2198		KITCHEN MODULE	D81337AK-0100RSB-T06-2198	SUBMITTED	7360015583100			
AK-0100	RSB-T06-2576		KITCHEN MODULE	D81337AK-0100RSB-T06-2576	SUBMITTED	7360015583100			
AK-0100	RSB-T06-2588		KITCHEN MODULE	D81337AK-0100RSB-T06-2588	SUBMITTED	7360015583100			
AK-0100	RSB-T06-2589		KITCHEN MODULE	D81337AK-0100RSB-T06-2589	SUBMITTED	7360015583100			
AK-0100	RSB-T06-2621		KITCHEN MODULE	D81337AK-0100RSB-T06-2621	SUBMITTED	7360015583100			
AK-0100	RSB-T06-2732		KITCHEN MODULE	D81337AK-0100RSB-T06-2732	SUBMITTED	7360015583100			

Figure 54. UII was created. Source: Department of the Army (n.d.-f).

Click view will show that the UID was submitted. In 24 hours, it will show that the UID has been registered.

WORKSHEET NAME: WORKSHEET TEMPLATE-28FEB17\_20170302061059.CSV

Click on the icons below to download the appropriate CSV worksheet.

PN/SN Template   

- Sort By: (Default is SN)

1st Level:  MODEL  PN  SN  NOMENCLATURE  UII  Status  NSN  UCN  OTHER

Displaying 20 of 20

	MODEL	PN	SN	NOMEN	UII	STATUS	NSN	UCN	OTHER
<input type="checkbox"/>	AK-0100	RSB-T06-2338	KITCHEN MODULE	D81337AK-0100RSB-T06-2338	REGISTERED	7380015583100			
<input type="checkbox"/>	AK-0100	RSB-T06-2339	KITCHEN MODULE	D81337AK-0100RSB-T06-2339	REGISTERED	7380015583100			
<input type="checkbox"/>	AK-0100	RSB-T06-2590	KITCHEN MODULE	D81337AK-0100RSB-T06-2590	REGISTERED	7380015583100			
<input type="checkbox"/>	AK-0100	RSB-T06-2599	KITCHEN MODULE	D81337AK-0100RSB-T06-2599	REGISTERED	7380015583100			

Figure 55. Displays shows UID was registered. Source: Department of the Army (n.d.-f).

Note: Every time you want to create and upload marks into registry download the PN/SN Template.

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## APPENDIX C. USING PBUSE

This appendix provides PMs with step by step instructions on creating an xml spreadsheet and uploading the data into PBUSE, creating the lateral transfer document, and xml file to be transferred to using G-Army. This is currently the best workaround for PMs to use to deliver equipment to tactical units.

### CREATING AN XML SPREADSHEET

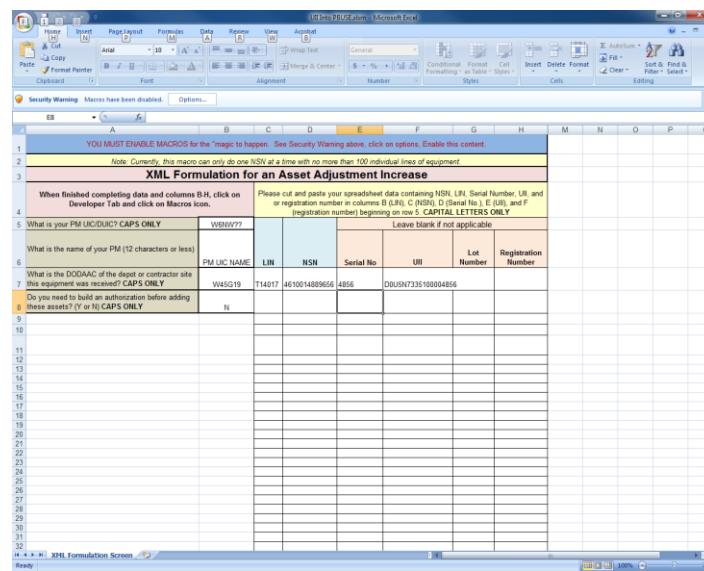


Figure 56. Sample of Macro spreadsheet.



Figure 57. Click enable this content and OK

Replace block 5 with UIC you want to post asset adjustment. Change W6NW?? to PMs UIC.

Replace block 6 with PM name. Change PM UIC NAME to name of UIC i.e., Field Services.

Replace block 7 with DODAAC: W45G19. Don't know why put needs this DODAAC.

Replace block 8 with Y.

NOTES: 1. MUST BE CAPITALS IN THIS SPREADSHEET. 2. ONLY USE ONE LIN AND NSN. YOU CAN UPLOAD UP TO 99 SERIAL NUMBERS AND UIIS.

Replace block C7 with LIN. Example: change T14017 with LIN off MSP

Replace block D7 with NSN. Example: change 4610014889656 with LIN of item.

Input block E7 and F7. You can add additional lines LIN and NSN adding new serial numbers and UII. You can also add lot number and registration number in row G7 and H7.

Figure 58. Xml spreadsheet with data

Click on Menu bar and find “View” then click on “Macros.”

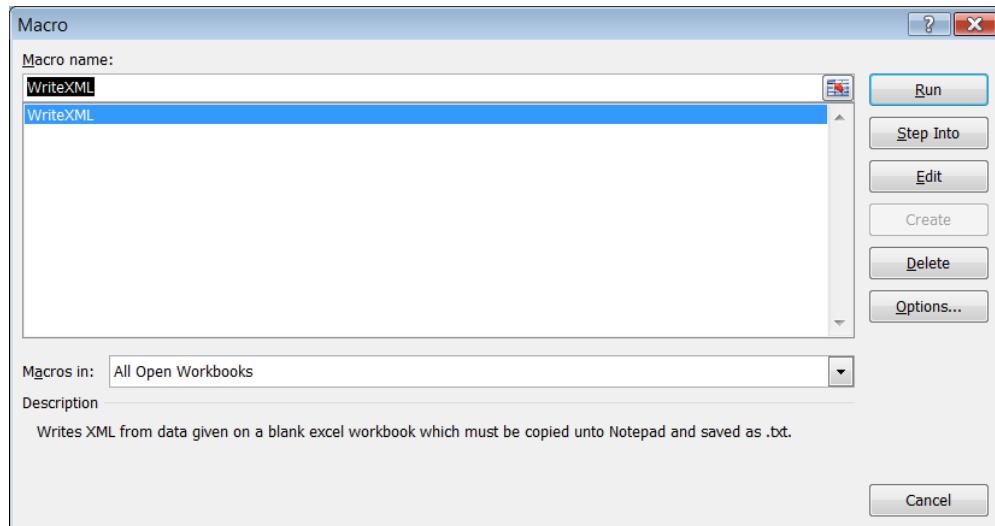


Figure 59. Click on run

**IMPORTANT:**  
 Copy and paste Highlighted text to Notepad  
 or other text editor (Rows 3 to 115, columns A-H).  
 Save the Notepad file as .txt and close.  
 Rename file extension from .txt to .xml from  
 Windows Explorer or My Computer.  
 You now have an xml ready to be downloaded  
 into PBUSE ATPI module.

Figure 60. Top view of xml spreadsheet

Copy all the way to A117 as shown in Figure 61.

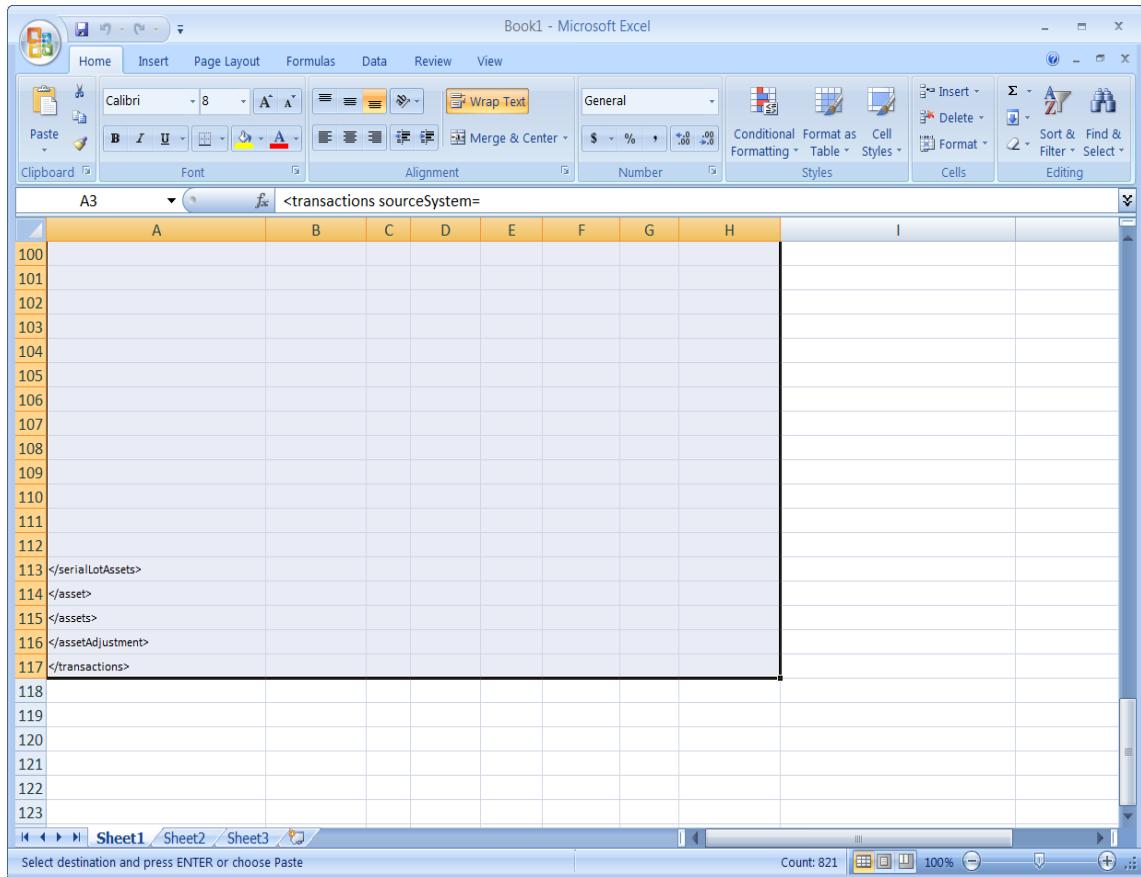


Figure 61. Bottom view of xml spreadsheet

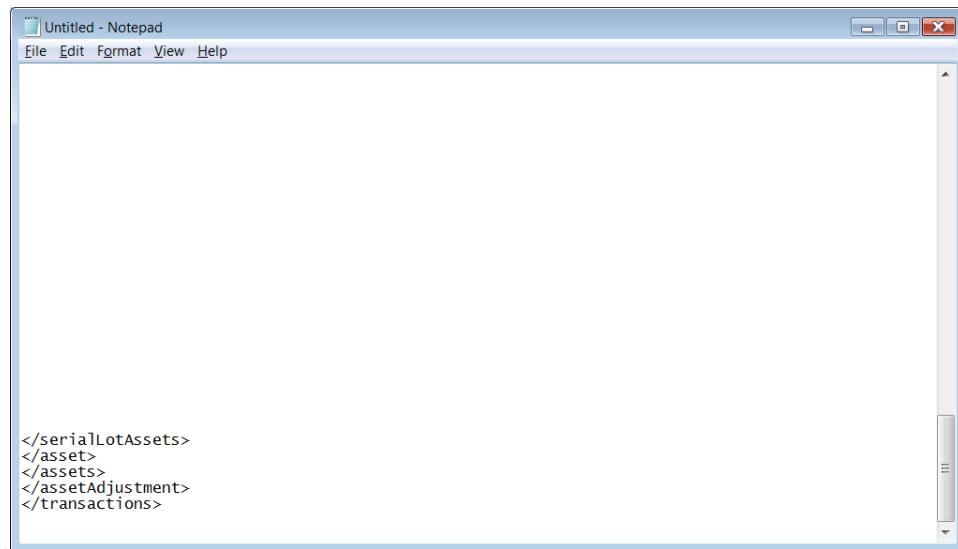


Figure 62. Go to start menu and open notepad and paste

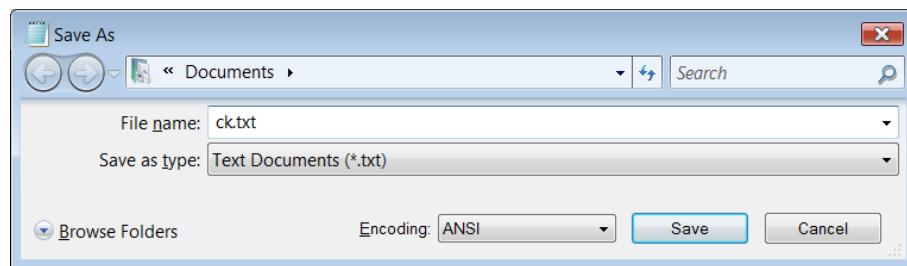


Figure 63. File save the document \*.txt and close the document

Make sure encoding says ANSI when you save it.

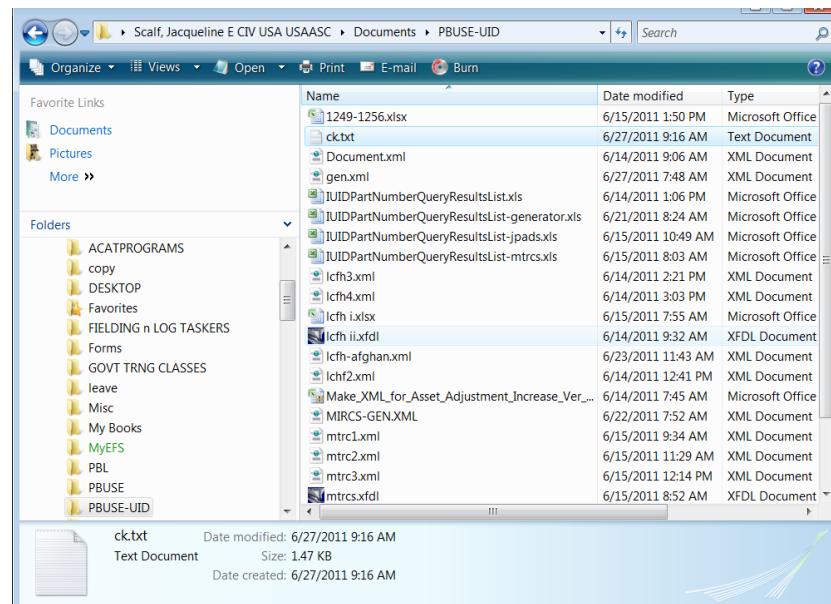


Figure 64. Locate the file and right click to rename .txt to .xml

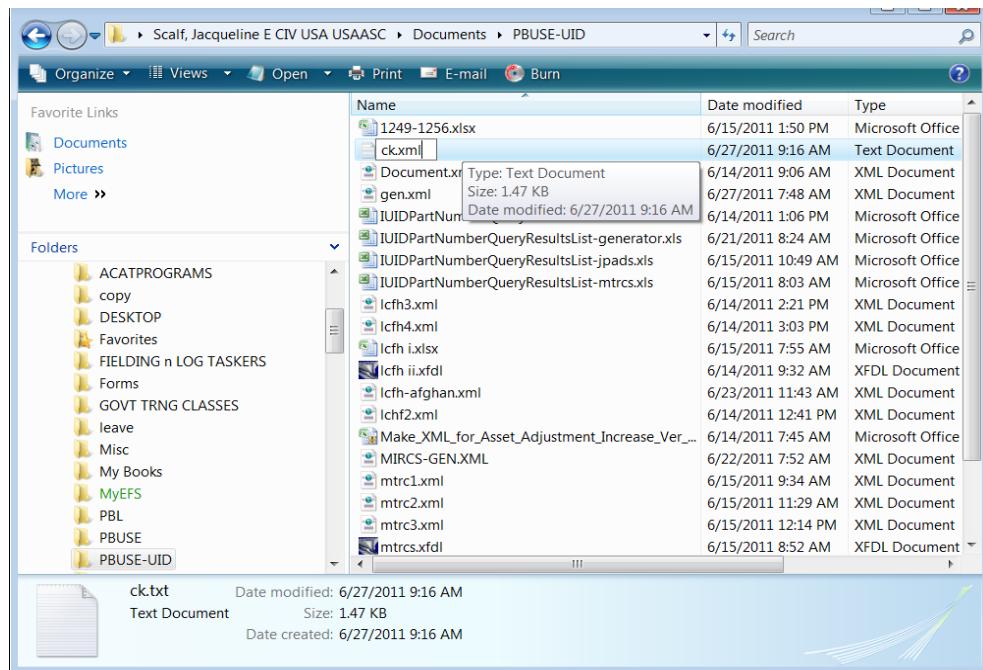


Figure 65. File renamed to .xml

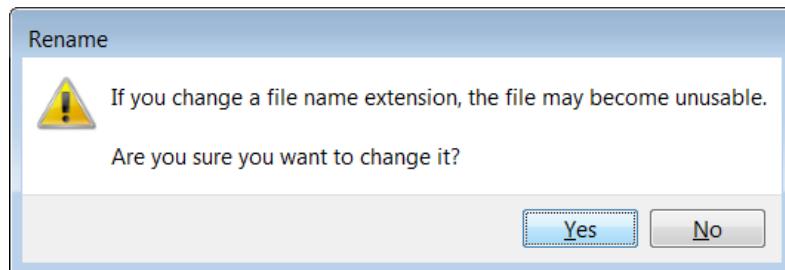


Figure 66. Click yes you want to change it

Login to PBUSE. website for Department of the Army (n.d. –e) is <https://pbuse.lee.army.mil/>.

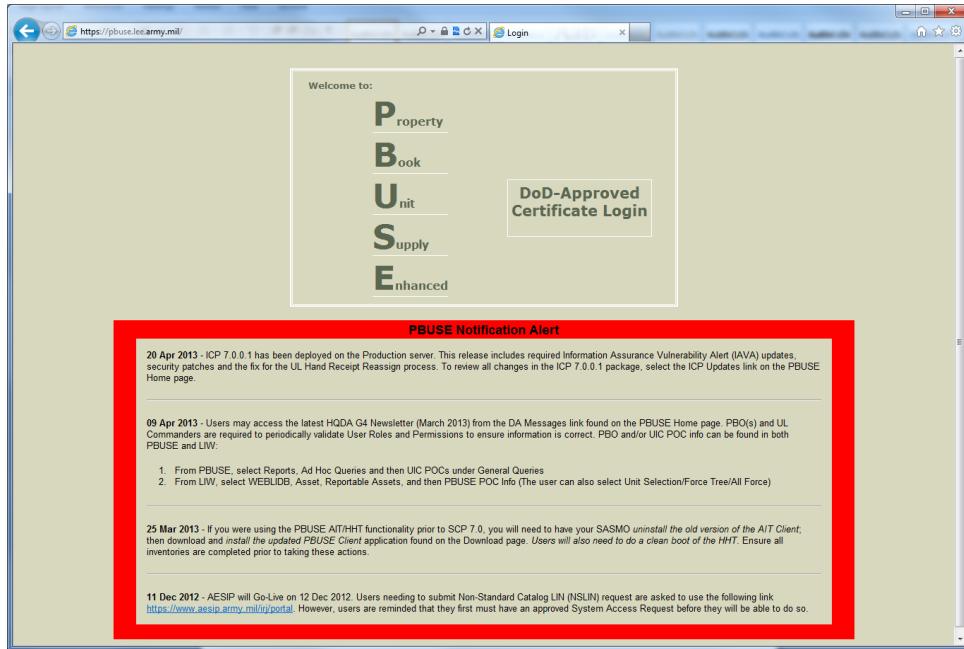


Figure 67. PBUSE website click login. Source: Department of the Army (n.d.-e).

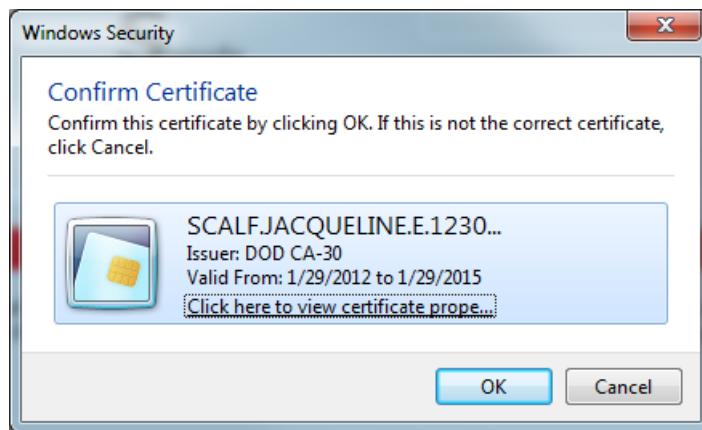


Figure 68. Login id to click ok. Source: Department of the Army (n.d.-e).

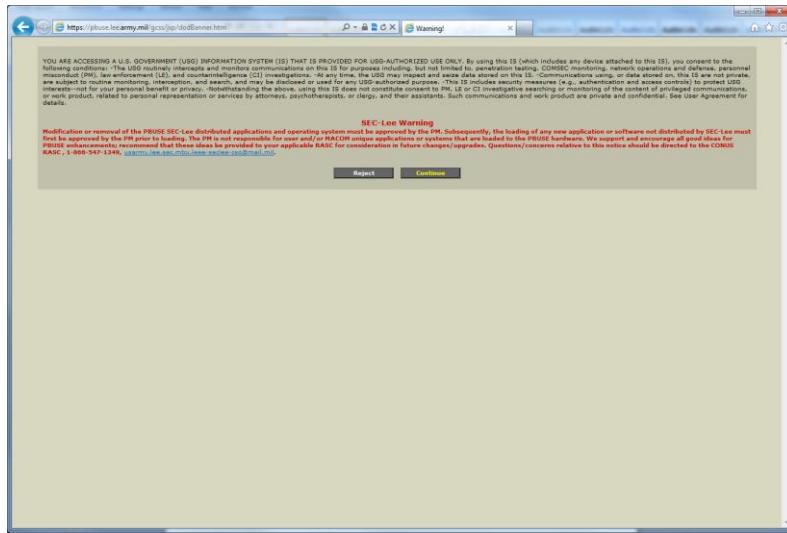


Figure 69. Click on continue. Source: Department of the Army (n.d.-e).

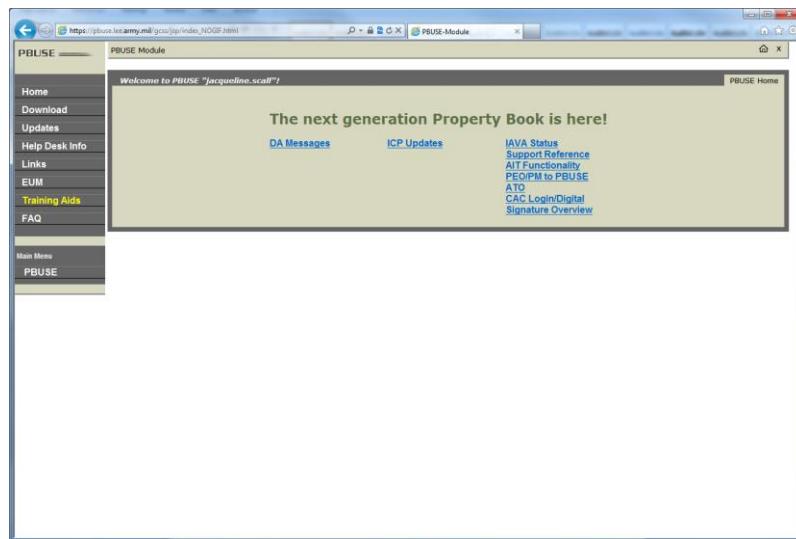


Figure 70. Click PBUSE. Source: Department of the Army (n.d.-e).

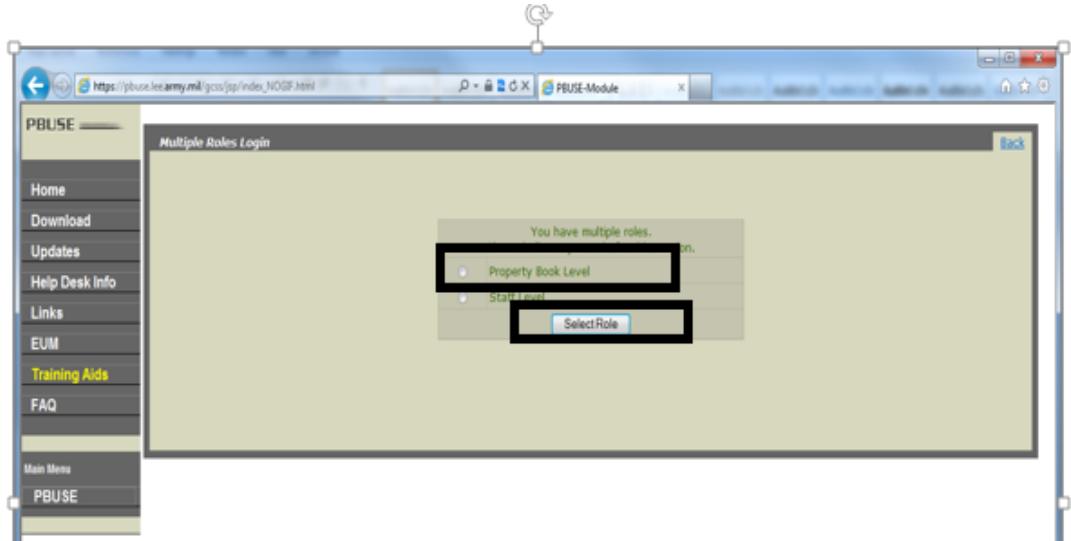


Figure 71. Click on Property Book Level and select role. Source: Department of the Army (n.d.-e).

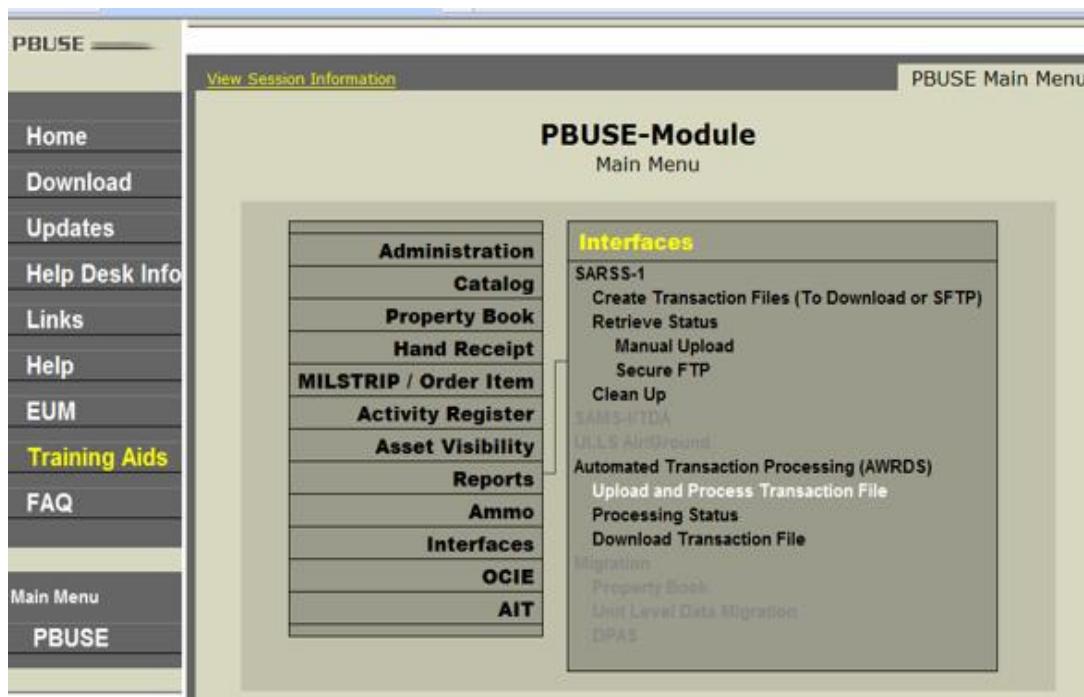


Figure 72. Click on interfaces and then under Automated Transaction Processing (AWRDS) then click on upload and process transaction file.  
Source: Department of the Army (n.d.-e).

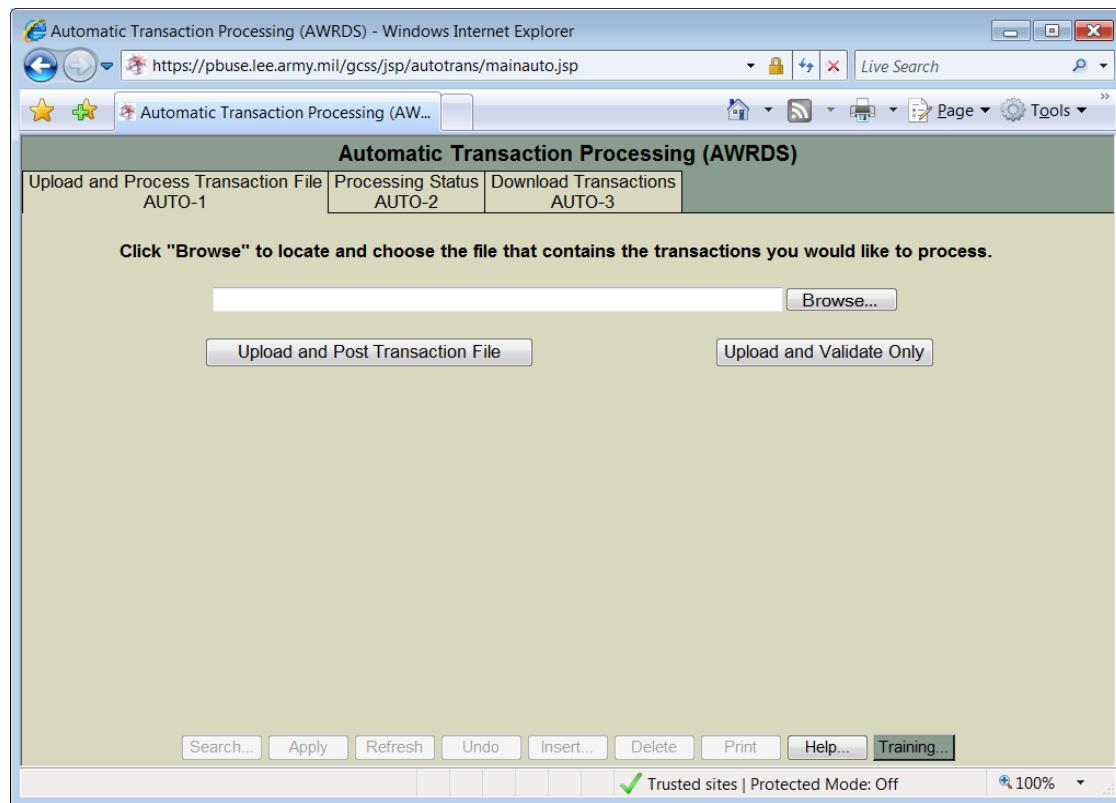


Figure 73. Browse and file the .xml file then click on upload and validate only.

Source: Department of the Army (n.d. -e).

Click on processing status and check for errors.

To fix errors you need to go back to the .xml file and rename it to .txt to fix it. You need to delete the extra line or you will get an error. Keep Upload and Validate Only until you are free of errors.

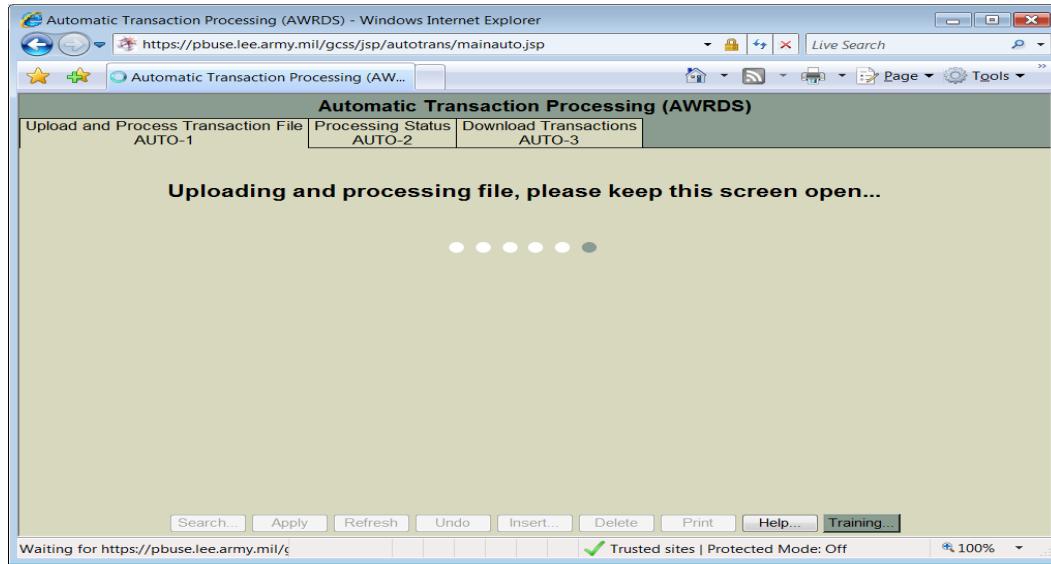


Figure 74. XML file uploading and processing. Source: Department of the Army (n.d. -e).

Then go back to “Upload and Process Transaction File” and browse file and Upload and Post Transaction File.

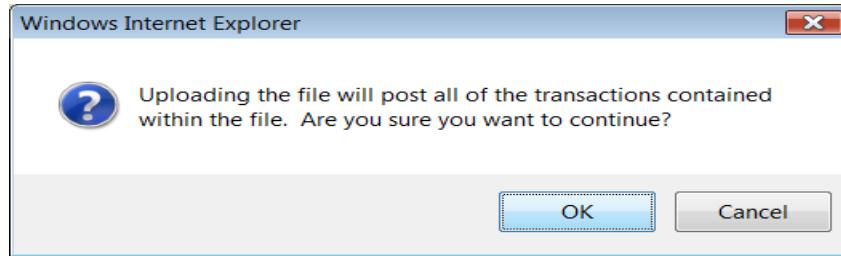


Figure 75. Click ok to upload the file to post to PBUSE. Source: Department of the Army (n.d.-e).

The screenshot shows a web-based application window titled "Automatic Transaction Processing (AWRDS)". At the top, there are three tabs: "Upload and Process Transaction File" (selected), "Processing Status", and "Download Transactions". Below the tabs, there are three sub-tabs: "AUTO-1", "AUTO-2", and "AUTO-3". A message at the top states: "The data below represents any transaction file uploaded by you. To view transactional data by UIC or data uploaded by other users, click the "Switch to UIC View" button." A "Switch to UIC View" button is located just below the message. A note below the message says: "Please note that transaction files submitted more than 30 days ago are automatically removed." A large table follows, containing columns for Delete, Date Uploaded, Processing Start Time, Processing End Time, Status, Status Message, Transaction Data, Error/Warning Messages, Validate Only, and Source System. The table lists numerous entries, each with a checkbox in the first column and a timestamp in the second column. The "Status" column shows mostly "Completed" status, with some "Validation completed successfully" messages. The "Source System" column consistently shows "WBNW46". At the bottom of the table are buttons for Search, Apply, Refresh, Undo, Insert, Delete, Print, Help..., and Training... .

Delete	Date Uploaded	Processing Start Time	Processing End Time	Status	Status Message	Transaction Data	Error/Warning Messages	Validate Only	Source System
<input type="checkbox"/>	18-Apr-13 06:37:39	18-Apr-13 06:37:40	18-Apr-13 06:37:44	Completed	Processing completed successfully and documents have been posted.	<a href="#">View</a>	<a href="#">View</a>		WBNW46
<input type="checkbox"/>	18-Apr-13 06:37:19	18-Apr-13 06:37:26	18-Apr-13 06:37:27	Completed	Validation completed successfully.	<a href="#">View</a>	<a href="#">View</a>	Y	WBNW46
<input type="checkbox"/>	17-Apr-13 10:24:54	17-Apr-13 10:24:55	17-Apr-13 10:25:01	Completed	Processing completed successfully and documents have been posted.	<a href="#">View</a>	<a href="#">View</a>		WBNW46
<input type="checkbox"/>	17-Apr-13 10:24:30	17-Apr-13 10:24:37	17-Apr-13 10:24:38	Completed	Validation completed successfully.	<a href="#">View</a>	<a href="#">View</a>	Y	WBNW46
<input type="checkbox"/>	16-Apr-13 11:07:23	16-Apr-13 11:07:24	16-Apr-13 11:07:27	Completed	Processing completed successfully and documents have been posted.	<a href="#">View</a>	<a href="#">View</a>		WBNW46
<input type="checkbox"/>	16-Apr-13 11:07:07	16-Apr-13 11:07:09	16-Apr-13 11:07:10	Completed	Validation completed successfully.	<a href="#">View</a>	<a href="#">View</a>	Y	WBNW46
<input type="checkbox"/>	16-Apr-13 10:31:16	16-Apr-13 10:31:28	16-Apr-13 10:31:33	Completed	Processing completed successfully and documents have been posted.	<a href="#">View</a>	<a href="#">View</a>		WBNW46
<input type="checkbox"/>	16-Apr-13 10:30:54	16-Apr-13 10:30:57	16-Apr-13 10:31:00	Completed	Validation completed successfully.	<a href="#">View</a>	<a href="#">View</a>	Y	WBNW46
<input type="checkbox"/>	08-Apr-13 05:02:14	08-Apr-13 05:02:16	08-Apr-13 05:02:21	Completed	Processing completed successfully and documents have been posted.	<a href="#">View</a>	<a href="#">View</a>		WBNW46
<input type="checkbox"/>	08-Apr-13 05:01:58	08-Apr-13 05:02:00	08-Apr-13 05:02:01	Completed	Validation completed successfully.	<a href="#">View</a>	<a href="#">View</a>	Y	WBNW46
<input type="checkbox"/>	05-Apr-13 04:11:56	05-Apr-13 04:12:00	05-Apr-13 04:12:04	Completed	Processing completed successfully and documents have been posted.	<a href="#">View</a>	<a href="#">View</a>		WBNW46
<input type="checkbox"/>	05-Apr-13 04:11:30	05-Apr-13 04:11:35	05-Apr-13 04:11:35	Completed	Processing completed successfully and documents have been posted.	<a href="#">View</a>	<a href="#">View</a>		WBNW46
<input type="checkbox"/>	05-Apr-13 04:10:48	05-Apr-13 04:10:50	05-Apr-13 04:10:53	Completed	Validation completed successfully.	<a href="#">View</a>	<a href="#">View</a>	Y	WBNW46
<input type="checkbox"/>	05-Apr-13 04:10:15	05-Apr-13 04:10:19	05-Apr-13 04:10:23	Completed	Validation completed successfully.	<a href="#">View</a>	<a href="#">View</a>	Y	WBNW46
<input type="checkbox"/>	04-Apr-13 06:03:10	04-Apr-13 06:03:12	04-Apr-13 06:03:15	Completed	Processing completed successfully and documents have been posted.	<a href="#">View</a>	<a href="#">View</a>		WBNW46
<input type="checkbox"/>	04-Apr-13 06:02:54	04-Apr-13 06:03:00	04-Apr-13 06:03:05	Completed	Processing completed successfully and documents have been posted.	<a href="#">View</a>	<a href="#">View</a>		WBNW46
<input type="checkbox"/>	04-Apr-13 06:02:32	04-Apr-13 06:02:34	04-Apr-13 06:02:36	Completed	Validation completed successfully.	<a href="#">View</a>	<a href="#">View</a>	Y	WBNW46
<input type="checkbox"/>	04-Apr-13 06:00:39	04-Apr-13 06:00:44	04-Apr-13 06:00:46	Completed	Validation completed successfully.	<a href="#">View</a>	<a href="#">View</a>	Y	WBNW46

Figure 76. Validated files and uploaded files into PBUSE under processing tab.  
Source: Department of the Army (n.d.-e).

## INSTRUCTION ON CONFIRMING UII DATA IS UPLOADED INTO PBUSE

Another checking place is to review the hand receipt it will show you UII is uploading because it colored orange or brown.

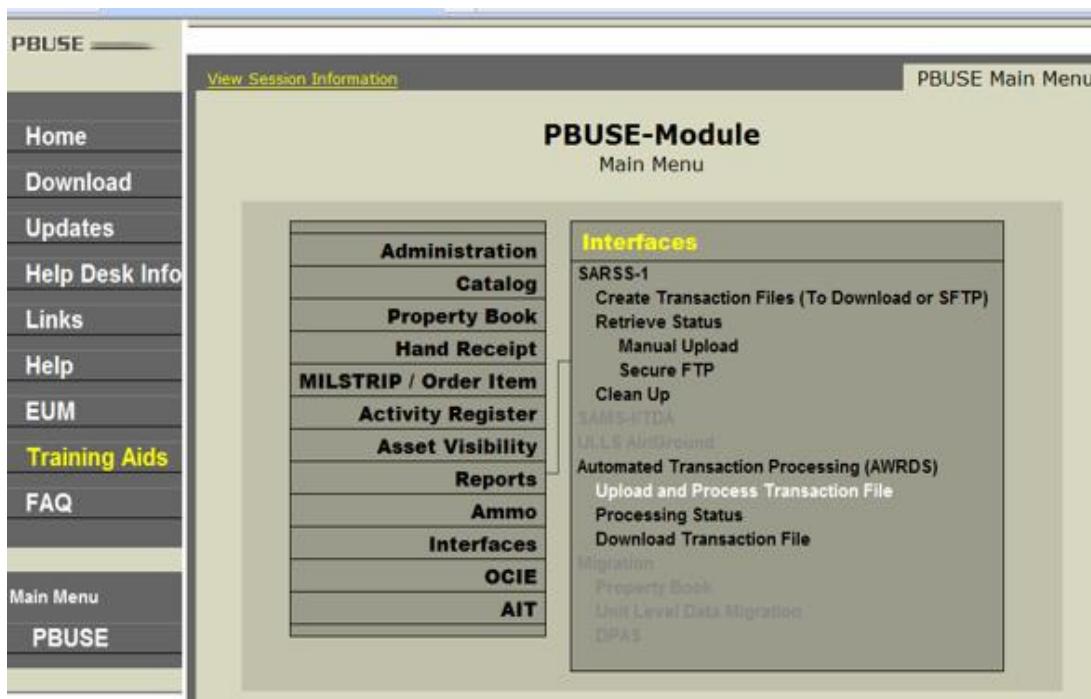


Figure 77. Click on hand receipt. Source: Department of the Army (n.d.-e).

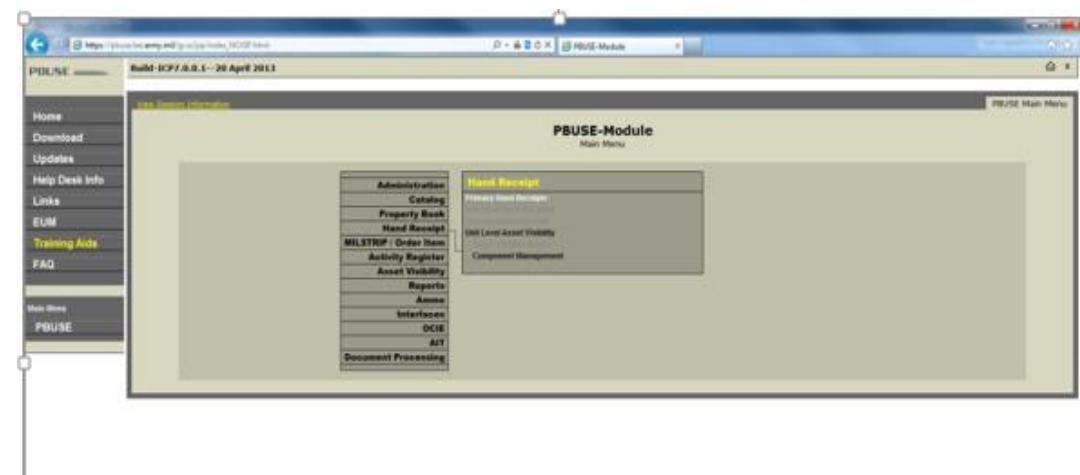


Figure 78. Click primary hand receipt. Source: Department of the Army (n.d.-e).

Find UIC and LIN if the UII data is uploaded the field will use orange.

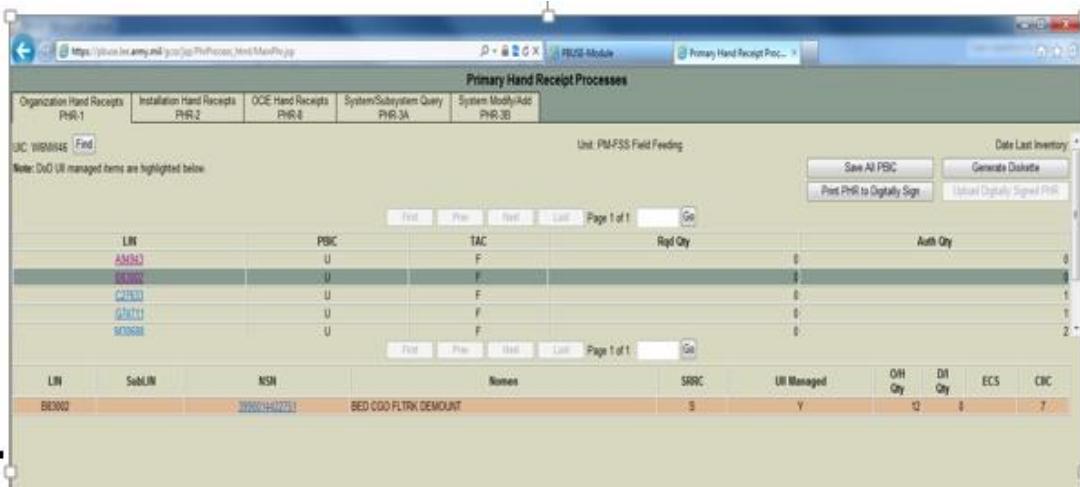


Figure 79. Posted item showing UII has been input. Source: Department of the Army (n.d.-e).

### Preparing PBUSE to PBUSE lateral transfers

Follow instructions to login to PBUSE.

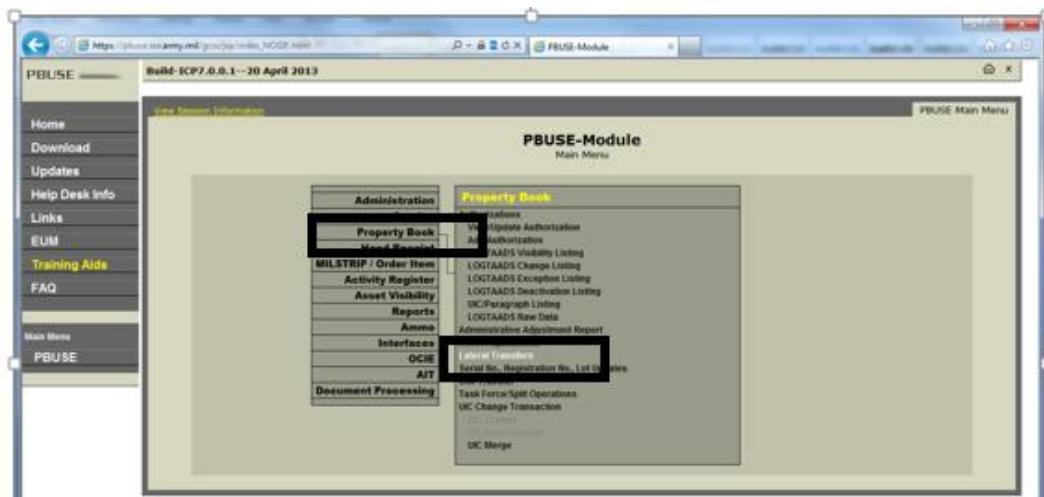


Figure 80. Click on property book and lateral transfers. Source: Department of the Army (n.d.-e).

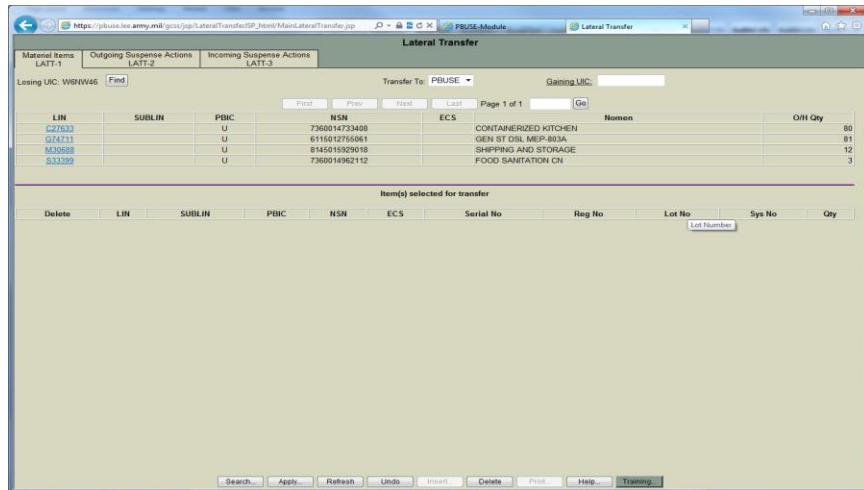


Figure 81. Select find to get losing UIC. Source: Department of the Army (n.d.-e).



Figure 82. Select losing UIC. Source: Department of the Army (n.d.-e).

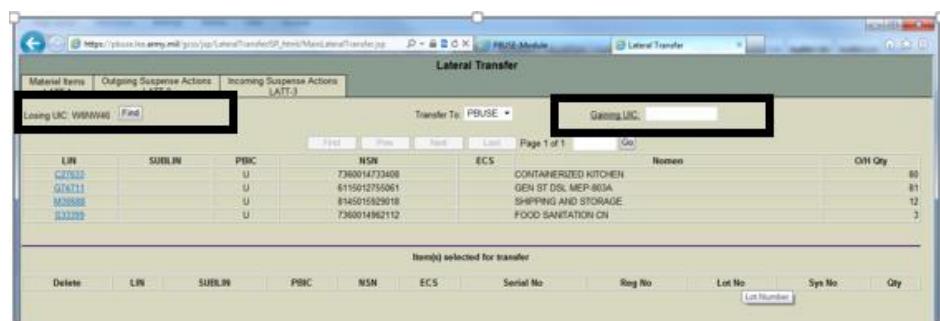


Figure 83. Type the gaining UIC. Source: Department of the Army (n.d.-e).

The gaining UIC comes from the MSP. Usually the “AA” will not work needs a directive UIC like A0, B0, D0, or T0

Select the LIN and click on apply. For serial number data items, see Figure 82.

The screenshot shows a Windows application window titled "Select Detail Items LATT-4". At the top, there are status bars for UIC: W6NW46, LIN: C27633, NSN: 7360014733408, PBIC: U ECS: OH Qty: 80. Below the title bar is a toolbar with buttons for First, Prev, Next, Last, Page 1 of 8, and Go. The main area is a table with columns: Select, Serial No, Reg No, Lot No, Sys No, and Qty. The table contains 12 rows of data, each with a checkbox in the "Select" column and a serial number in the "Serial No" column. The serial numbers are: 47990, 47991, 47992, 47994, 47995, 47996, 47998, 48000, 48004, and 48005. The "Qty" column shows values of 1 for all rows. At the bottom of the table are buttons for Search, Apply, Select all Serial/Lot for this asset, Refresh, and Close.

Figure 84. Select the serial number and apply. Source: Department of the Army (n.d.-e).

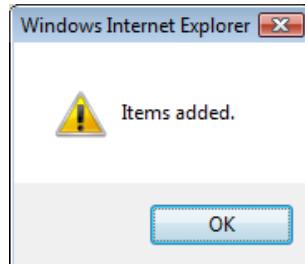


Figure 85. PBUSE will ask to add the items the click OK. Source: Department of the Army (n.d.-e).

When all done adding the items needed you hit apply. Once you get apply, you can only remove items from the DA Form 3161 not add.

The screenshot shows the 'Lateral Transfer' application interface. At the top, there are tabs for 'Material Items LATT-1', 'Outgoing Suspense Actions LATT-2', and 'Incoming Suspense Actions LATT-3'. The 'Outgoing Suspense Actions' tab is selected. Below the tabs, it says 'Transfer To: PBUSE' and 'Gaining UIC: WJQ4D0'. A search bar shows 'Losing UIC: W6NW46'. A table lists items being transferred:

LIN	SUBLIN	PBIC	NSN	ECS	Nomen	O/H Qty
A94943		U	7360015583100		KITCHEN MODULE	2
B83002		U	3990014422751		BED CQ FLTRK DEMOUNT	18
C27633		U	7360014733408		CONTAINERIZED KITCHEN	16
G74711		U	6115012765061		GEN ST DSL MEP-803A	16
M30688		U	8145015343597		MULT-TEMP REFR CONT	6

Below this, a section titled 'Item(s) selected for transfer' shows the same items with checkboxes:

Delete	LIN	SUBLIN	PBIC	NSN	ECS	Serial No	Reg No	Lot No	Sys No	Qty
<input type="checkbox"/>	A94943		U	7360015583100		RSB-T06-1632				1
<input type="checkbox"/>	A94943		U	7360015583100		RSB-T06-1634				1
<input type="checkbox"/>	T95924		U	2330013875426		124500037212				1
<input type="checkbox"/>	T95924		U	2330013875426		35796				1

At the bottom, there are buttons for 'Search...', 'Apply...', 'Refresh', 'Undo', 'Insert...', 'Delete', 'Print...', 'Help...', 'Training...', and 'OK'. The status bar shows 'Done' and 'Trusted sites | Protected Mode: Off'.

Figure 86. Items added to lateral transfer. Source: Department of the Army (n.d.-e).

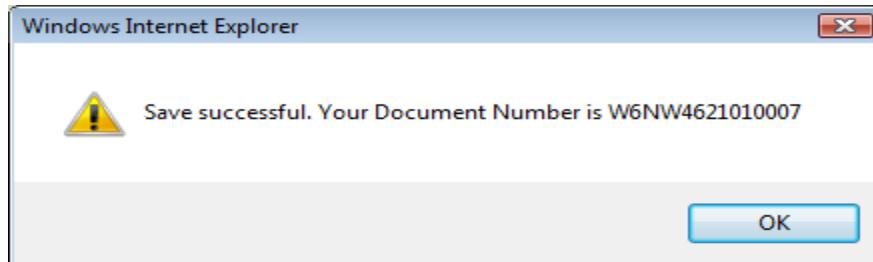


Figure 87. PBUSE generated document number. Source: Department of the Army (n.d.-e).

Lateral Transfer - Windows Internet Explorer  
https://pbuse.lee.army.mil/gcss/jsp/LateralTransferISP\_html/MainLateralTransfer.jsp

File Edit View Favorites Tools Help

Lateral Transfer

Material Items Outgoing Suspense Actions Incoming Suspense Actions

LATT-1 LATT-2 LATT-3

Doc No: W6NW4820940025 Find Type Action Code: S Form: DA3161

Losing UIC: W6NW48 Gaining UIC: WHGHAA Notify Gaining PBO Generate Fed Form Upload Signed Fed Form

First Prev Next Last Page 1 of 1 Go

Delete	LIN	SUBLIN	PBIC	NSN	ECS	Nomen	Serial No	Reg No	Lot No	Qty	Losing Qty	CHR	SELECT CHR	UII
<input type="checkbox"/>	H00654		U	4520015598737		HEATER DUCT TYPE PO	175111081010002460			1	1			Y

Search... Apply... Refresh Undo Insert... Delete Print... Help... Training... Done Trusted sites | Protected Mode: Off 100% :

Figure 88. Click generate fed form then a pop up screen will ask to file save as the form on my documents or desktop. Source: Department of the Army (n.d.-e).

Figure 89. Open the form from desktop or mydocuments in Adobe Acrobat.

Click on drop down in code select “LT”

Copy the statement into the spreadsheet under Remarks: – print – and save.

THIS IS A TOTAL PACKAGE FIELDING. DO NOT ADD THIS EQUIPMENT USING A PBUSE ASSET ADJUSTMENT. PLEASE REFER TO PBUSE INCOMING LATERAL TRANSFERS AND ACCEPT OR DECLINE THE LATERAL TRANSFER. IF THE TRANSFER CANNOT BE ACCEPTED OR IS DELAYED, PLEASE NOTIFY THE PM POC ASAP.

## PBUSE to GCSS-Army lateral transfers

Instructions for preparing XML file after receiving the signed DA Form 3161 from the unit. Login to PBUSE

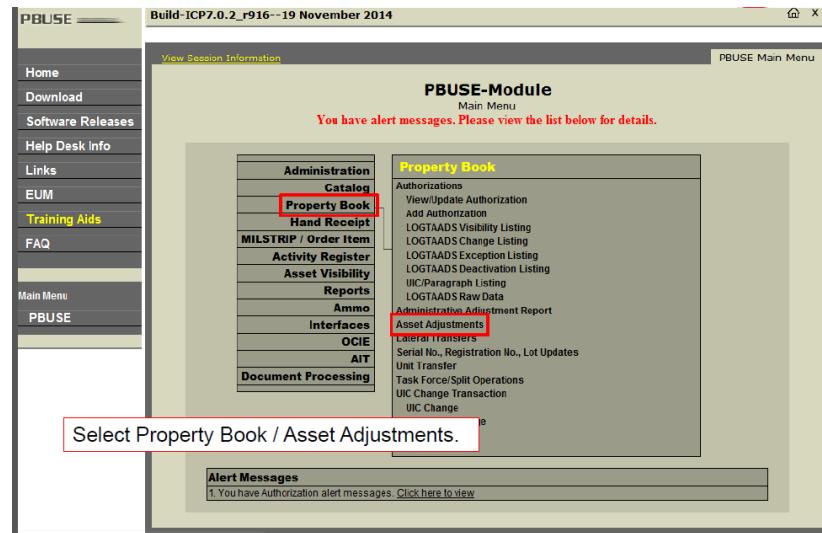


Figure 90. Select property book/asset adjustments. Source: Department of the Army (n.d.-e).

Asset Adjustments							
Material Items		Suspense Actions					
AADJ-1		AADJ-2					
UIC: WH05C0				Find Unit: 00053F BN 02 CO C A			
LIN	PBIC	TAC	Rqd Qty	Auth Qty		Auth Doc No.	
DA6515	J	3	0	32		CTA 50-900	
DA6523	2	3	0	12		CTA 50-900	
DA6530	2	3	0	12		CTA 50-900	
DA655D	2	3	0	15		CTA 50-900	
DA657N	2	3	0	8		CTA 50-900	
First Prev Next Last Page 1 of 41 Go							
LIN	SubLIN	NSN	Nomen	SRR	O/H Qty	D/I Qty	ECS
E03826		6825013239584	TEST SETTS-4348/UV	S	6	0	

Select the item to transfer.

Figure 91. Items to be transferred. Source: Department of the Army Property Book (n.d.-e).

**Asset Adjustments**

Material Items AADJ-1	Suspense Actions AADJ-2
--------------------------	----------------------------

UIC: WH05C0  Unit: 0005SF BN 02 CO C A

**Materiel Item Asset Adjustments AADJ-4**

Adjustment Action: DECREASE Form: DA\_3161  
 Type Action Code: P Type Trans Crd: LTL - Transfer non-PBUSE acct  
 Doc Num: G/L DODAAC: wh51b0

UIC: WH05C0	LIN: E03826
PBIC: 8	TAC:
NSN: 6625013239584	SubLIN:
ECS:	O/H Qty: 6
Adj Qty: 2	
Remarks: Test Transfer to GCSS-Army Unit	

The Adjustment Action will be “DECREASE”, the Form will be “DA\_3161” and the Type Transfer Code will be “LTL – Transfer to non-PBUSE account”. (The DoDAAc in this example is actually a UIC) You could place this in suspense if needed.

Figure 92. Decrease instructions. Source: Department of the Army (n.d.-e).

**Materiel Item Asset Adjustments AADJ-4**

Adjustment Action: DECREASE Form: DA\_3161  
 Type Action Code: P Type Trans Crd: LTL - Transfer non-PBUSE acct  
 Doc Num:

Message from webpage

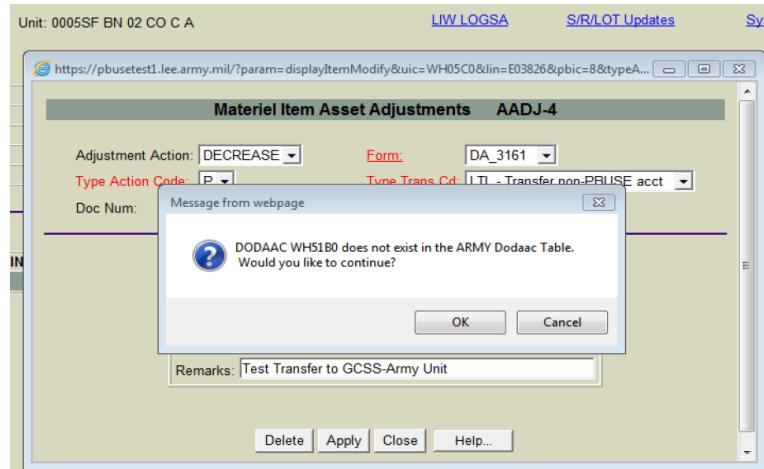
Are you sure you want to decrease this item?

UIC:  
PBIC:  
NSN:  
ECS:  
Adj Q

Remarks: Test Transfer to GCSS-Army Unit

Select OK.

Figure 93. Confirm you want to decrease the item Source: Department of the Army (n.d.-e).



Select OK. The DoDAAC won't be registered in the Army DoDAAC Table because of the backward/forward capability issue. The point is to push the transfer through anyway.

Figure 94. DoDAAC are critical for file transfers to GCSS-Army. Source: Department of the Army (n.d.-e).

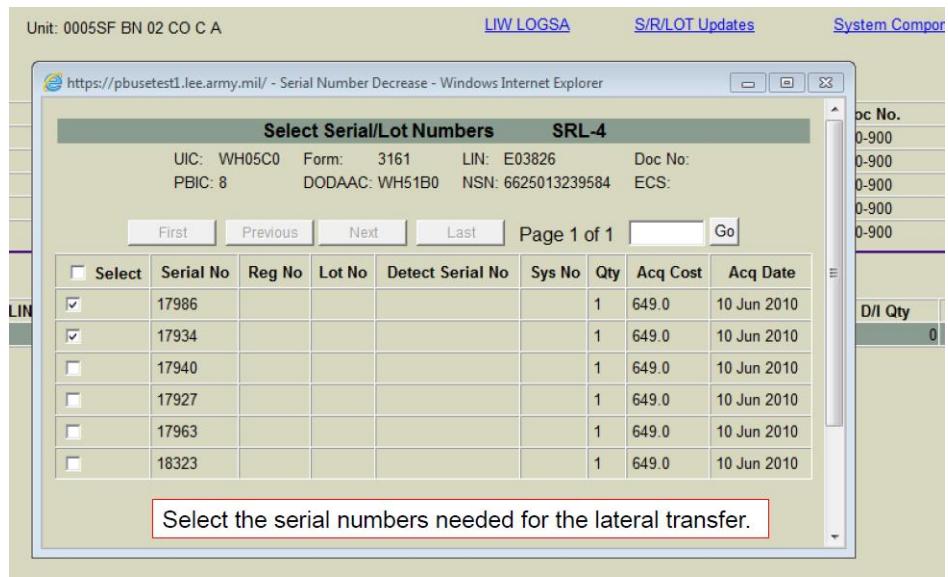


Figure 95. Select serial number for serialized items. Source: Department of the Army (n.d.-e).

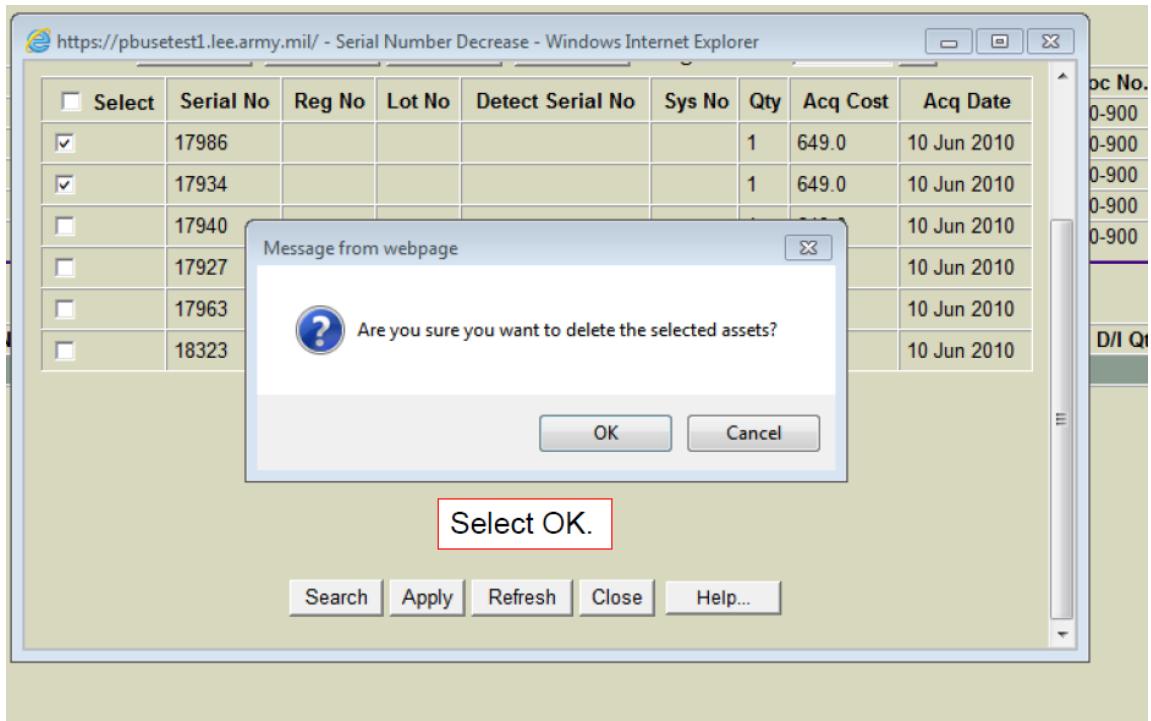


Figure 96. Confirmation of deletion from PBUSE Source: Department of the Army (n.d.-e).

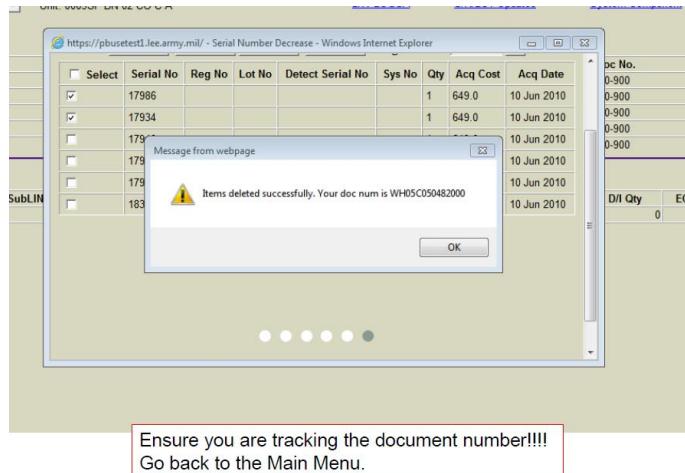


Figure 97. Document number should be written on signed DA Form 3161. Source: Department of the Army (n.d.-e).

**Automatic Transaction Processing**

Upload and Process Transaction File	Processing Status	Download Transactions
AUTO-1	AUTO-2	AUTO-3

Destination System:  Doc No:  Add To List Generate File

Delete	Doc No	In Suspense	DIC	UIC	DODAAC	Form No	Document Details

Select the Download Transactions AUTO-3 tab.

Figure 98. Go to PBUSE Main screen and click on download transaction file.  
Source: Department of the Army (n.d.-e).

**Automatic Transaction Processing**

Upload and Process Transaction File	Processing Status	Download Transactions
AUTO-1	AUTO-2	AUTO-3

Destination System:  Doc No:  Add To List Generate File

Delete	Doc No	In Suspense	DIC	UIC	DODAAC	Form No	Document Details

Destination System will be “GCSS-Army” and the Doc No will be the from the Asset Adjustment decreased on slide 8. Select “Add to List”.

Figure 99. Click on GCSS-Army and input document number. Source:  
Department of the Army (n.d.-e).

**Automatic Transaction Processing**

<a href="#">Upload and Process Transaction File</a>	<a href="#">Processing Status</a>	<a href="#">Download Transactions</a>
AUTO-1	AUTO-2	AUTO-3

Destination System: [GCSS-Army](#) Doc No:  Add to list [Generate File](#)

Delete	Doc No	In Suspense	DIC	UIC	DODAAC	Form No	Document Details
<input type="checkbox"/>	WH05C050482000	N	ZRI	WH05C0	WH51B0	3161	<a href="#">View</a>

Select "View" to ensure the transaction is as you intended. PBUSE is able to produce many transactions at one time. Not sure if you will be able to send all to GCSS-Army at once.

Figure 100. Click on view. Source: Department of the Army (n.d.-e).

**Automatic Transaction Processing**

<a href="#">Upload and Process Transaction File</a>	<a href="#">Processing Status</a>	<a href="#">Download Transactions</a>
AUTO-1	AUTO-2	AUTO-3

Destination System: [GCSS-Army](#) Doc No:  Add to list [Generate File](#)

Delete	Doc No	In Suspense	DIC	UIC	DODAAC	Form No	Document Details
<input type="checkbox"/>	WH05C050482000	N	ZRI	WH05C0	WH51B0	3161	<a href="#">View</a>

Select "Generate File".

Figure 101. Click on generate file. Source: Department of the Army (n.d.-e).

**Automatic Transaction Processing**

<a href="#">Upload and Process Transaction File</a>	<a href="#">Processing Status</a>	<a href="#">Download Transactions</a>
AUTO-1	AUTO-2	AUTO-3

The file has been generated please right-click the link below and select "Save Target As" to save the file to a location of your choosing.

[Back to Download Transaction](#)

[Download File](#)

[Download and save the file.](#)

Figure 102. Click download and file save as to email via AMRDEC.  
Source: Department of the Army (n.d.-e).

## **APPENDIX D. INSTRUCTION ON USING IUID IN DPAS**

This appendix provides PMs with systematic instructions on ensuring IUID compliance within DPAS. As a rule, only use DPAS to manage Government Furnished Equipment (GFE) to contractors.

Official Link: <https://app.dpas.dod.mil/>

### **WHAT IS DPAS?**

Department of Defense (n.d.) states

DPAS is a Department of Defense (DOD) property management system. It is the Accountable Property System of Record (APSR) for over 32 DOD Agencies and Military Services. DPAS contains three modules, Property Accountability, Maintenance & Utilization and Warehouse Management. This program is administered by the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics (OUSD AT&L), a branch of the Office of the Secretary of Defense.

DPAS is an approved Accountable Property System of Record (APSR), and in the context of this document, it interfaces with the IUID Registry and Wide Area Workflow (WAWF).

### **DPAS IUID Process**

DPAS IUID Business Rules.

There are four major IUID Requirements for serial Accountable assets. These assets must

Be “Assigned” a Unique Item Identifier (UII).

Be “Recorded” in Web DPAS.

Be “Marked (Tagged)” with a DOD compliant 2-D Data Matrix containing the UII.

Be “Reported” to the IUID Registry

a. The UII Status Codes (Sts Cds) in Web DPAS are instrumental in ensuring these requirements are met.

- b. Apply virtual UIIs to any serial accountable assets that do not already have a UII from a vendor.

**Definitions:**

**Assigned** means that a UII has been associated with a Web DPAS asset

**Recorded** means that the UII has been entered into Web DPAS

**Marked or tagged** means that the UID is on the asset somewhere, either permanently marked on the asset, or with a separate tag containing the UID

**Reported means** that the IUID Registry contains that UII for the associated asset.

**DPAS Status Codes** Department of Defense (n.d.)

Table 5. Assets with an assigned UII

CODE	1 <sup>ST</sup> POSITION	2 <sup>ND</sup> POSITION	3 <sup>RD</sup> POSITION
	ASSIGNED	RECORDED	TAGGED
ART	X	X	X
ARN	X	X	
ANT	X		X
ANN	X		

Table 6. For assets without an assigned/identified UII

CODE	DESCRIPTION
NNN	<b>ASSIGN VIRTUAL UII</b>
NDT	<b>NOT DETERMINED</b>
DMC	<b>DOES NOT MEET CRITERIA</b>

The top table shows assets that have a UII, either assigned or virtual.

The bottom table shows assets that have NO UII of any kind. Of these, you should note the code of NNN, this is how to get Web DPAS to assign a virtual UII to an asset.

The final goal in assigning a UII to an asset is to reach the status of ART.

It is important to note that in order to dispose of or turn-in a serial accountable asset, the UII Status Code must be ART, ANT, or NDT.

In order to process any loan action for an asset, the UII Status Code must be ART.

### **Recording UIIs in DPAS**

There are three ways to record UIIs in Web DPAS

Manually Recording Existing UIIs (UII was assigned by the vendor)

Using a Scanner to Record UIIs (UII was assigned by the Vendor)

Have Web DPAS Create Virtual UIIs (For Legacy assets)

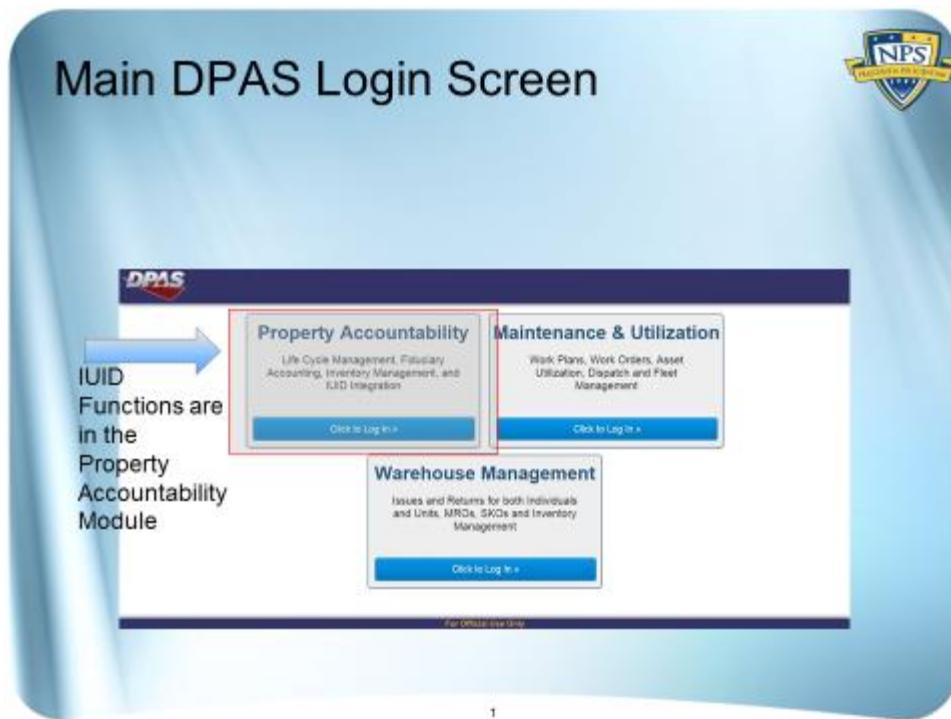


Figure 103. Main DPAS login screen. Source: Department of Defense (n.d.).

### Manually Recording Existing UIIs in Web DPAS

This is for assets that already have a UII assigned by a vendor and have been entered into the Registry.

From the Web DPAS Main Menu, you will select **Asset Management**, then **UII Registry Query**. The UII must be already assigned, usually by the vendor. This is a six-step process that is fairly straightforward. The steps and screenshots are below:

From the Asset Management Menu, select UII Registry Query.

Enter the Asset ID.

You can either type in the Web DPAS Assessed ID, or browse for it. The process we are describing works only for UIIs that are in the Registry. The process verifies from the Registry, but it does not add to the Registry. The asset would have had a UII Status Code of other than ART. The goal is to end the process with a UII Status Code of ART.

Select Search

When you select Search, the UII may populate, or you can enter it in.

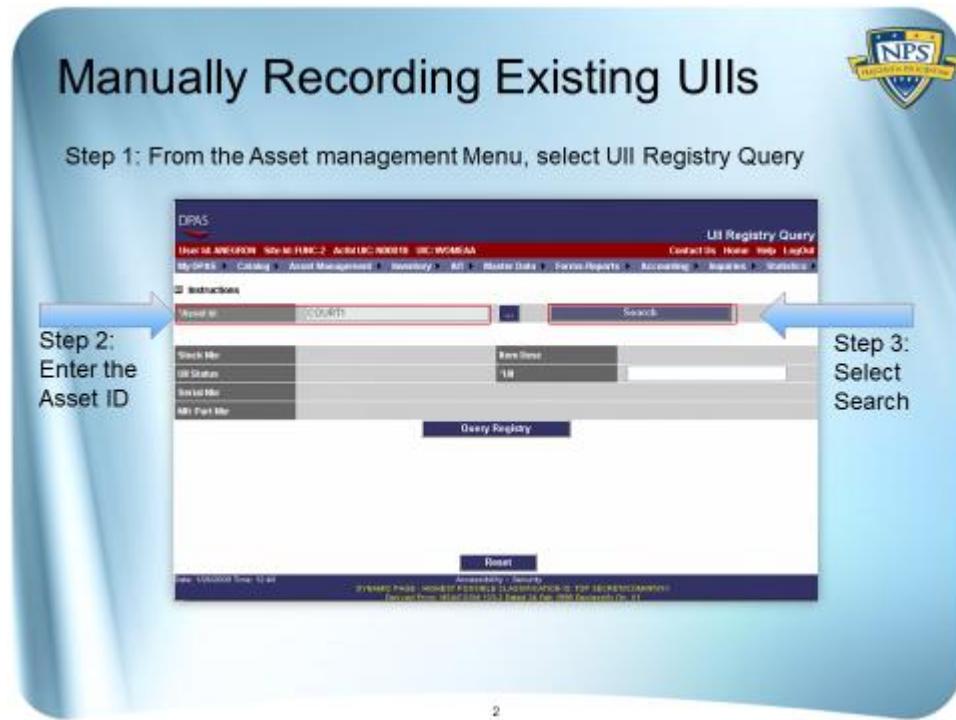


Figure 104. Select search, the UII may populate or enter it. Source: Department of Defense (n.d.).

Enter the UII

Select “Query Registry”

When you select the Query Registry button, Web DPAS automatically checks against the IUID Registry to see if a vendor or previous organization recorded the UII. If NOT, the error shown at the bottom of the screen appears. IF that happens you are done here, and must have the vendor enter the UII into the registry or assign a virtual UII.

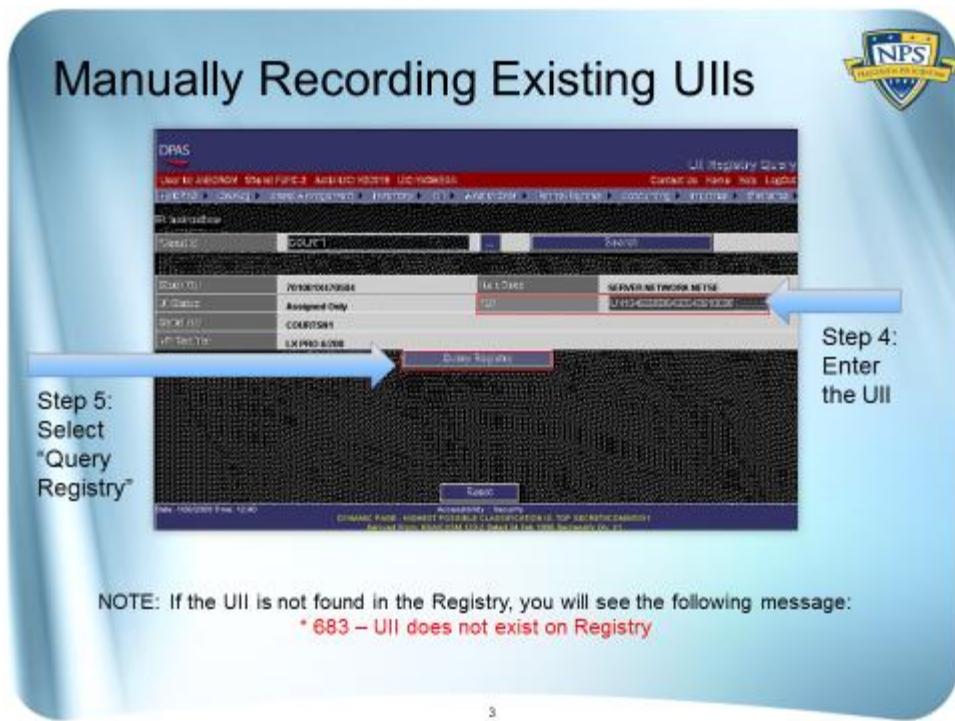


Figure 105. Shows UII not in registry. Source: Department of Defense (n.d.).

Choose “Tagged” or “Not Tagged”

If you are able to continue, choose whether the asset is marked or tagged. If you select not tagged, you may do that as part of the process you are performing now, or mark or tag the asset at a later date, e.g., at your next inventory. The goal is if the asset is tagged, we want to recognize that and record it. If the asset is NOT tagged, we need to determine how to do that.

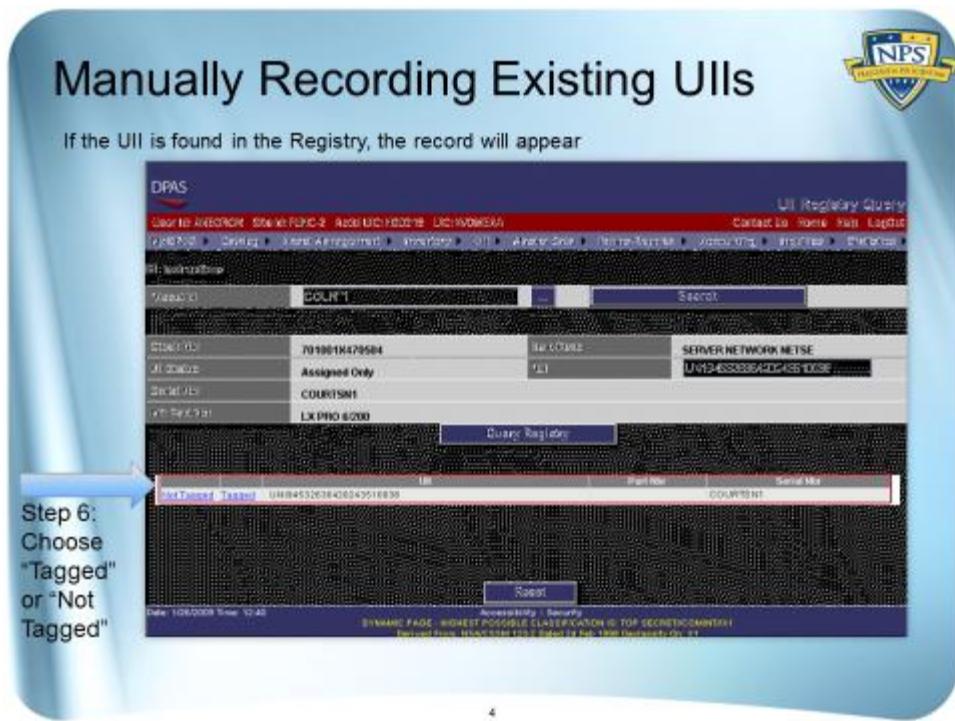


Figure 106. Shows UII found in registry. Source: Department of Defense (n.d.).

## Using a Scanner to Record UIs

An alternative to the manual process is to use your AIT device to associate the Web DPAS Asset ID and the UII, which has already been assigned, usually by a vendor. This process works only if the asset already has a UII mark or tag on it, and you have a Web DPAS Asset ID label. (Department of the Army Defense Property Accountability System (DPAS) [Computer software])

In Step 1, after you have fired up your scanner, from the DpasAit menu, select Associate UII.

When the opening screen comes up as shown in Step 2, enter your User ID.

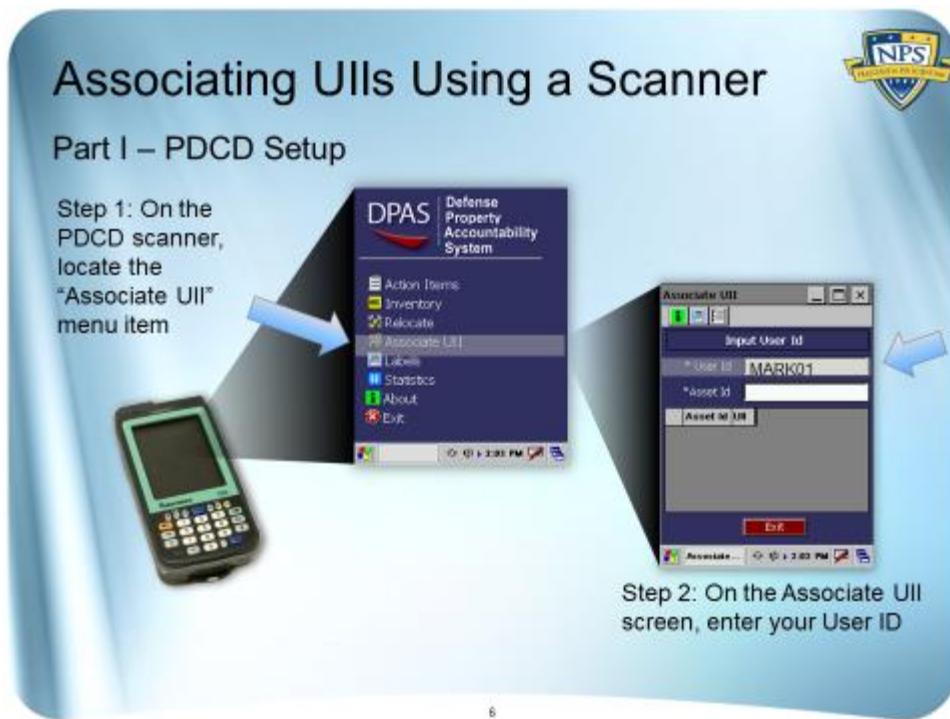


Figure 107. Part I – PDCD setup. Source: Department of Defense (n.d.).

Continue to perform the step in the order shown ... scan the Web DPAS Asset ID, then scan the UII. The Web DPAS Asset ID provides the reference into DPAS so that you can associate the UII. When you have completed your scans, remember that the information is stored on the scanner; nothing has been done yet. That is the next step.

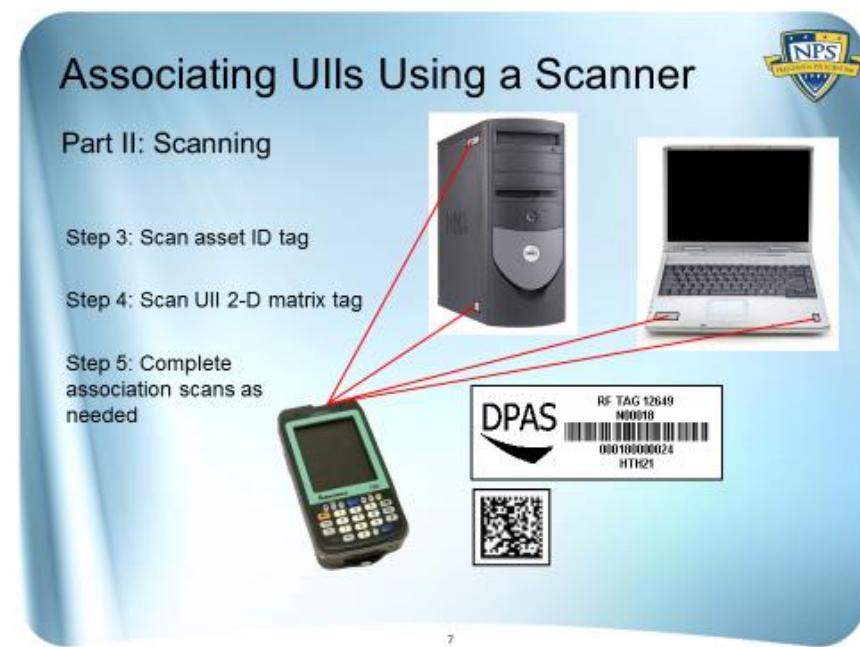


Figure 108. Part II: Scanning. Source: Department of Defense (n.d.).

The rest of this process is similar to performing an upload of a Web DPAS inventory.

Review your information on the screen before proceeding with the upload. Put the scanner in the cradle that is connected to your PC. From the Web DPAS Main Menu, select AIT, then select Upload from PDCD.

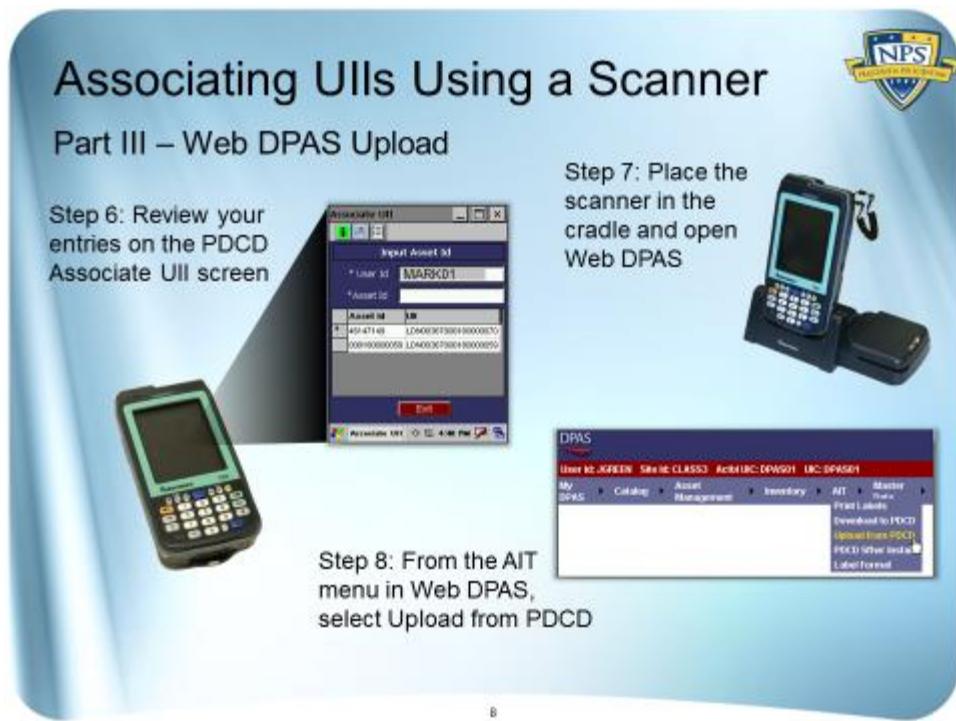


Figure 109. Part III: Web DPAS upload. Source: Department of Defense (n.d.).

A page will appear instructing you to place the PDCD into the cradle; you should select Continue. Notice that you must check the box as shown in Step 10. When you select Upload, the process completes.

## Associating UIs Using a Scanner

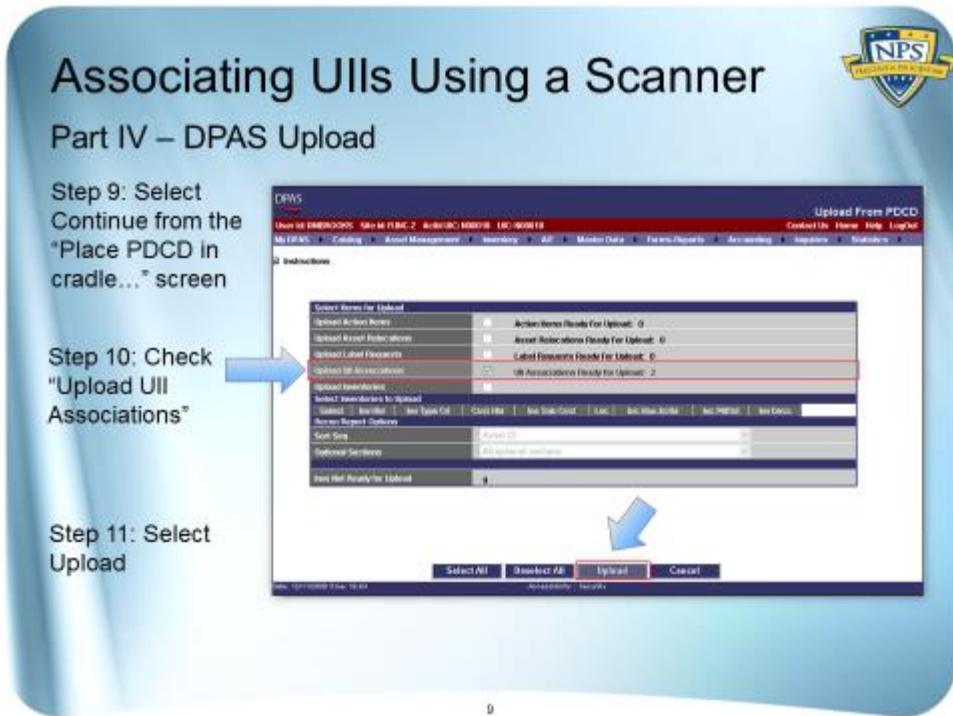


Figure 110. Part IV: DPAS upload. Source: Department of Defense (n.d.)

You should receive a successful transaction completion screen. A report will be generated and placed in the Forms. Reports grid where you can retrieve and view it.

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## **APPENDIX E. INSTRUCTIONS ON USING SMART SCANNER TO OBTAIN UII DATA**

This appendix provides step-by-step guidance on how to upload data into a notebook file to be copied and pasted into an xml for use in the fielding process. Smart scanner technology as described in this paper.

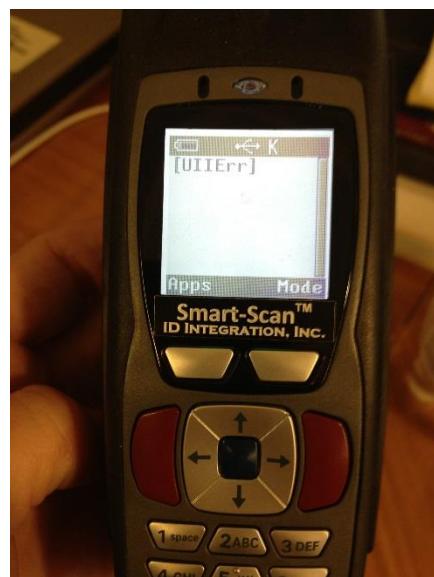


Figure 111. Scanner picture

Turn on scanner using the trigger. Scanner ready to scan.

Notice Keys below Apps and

Scanned data – Scan all the units for the fielding. (Each UII will beep when scanned).



Figure 112. Scanner showing UII data

After all the equipment is scanned – the data will be uploaded into notepad (instructions below).

Start menu – open notepad. Go to Format then Font:

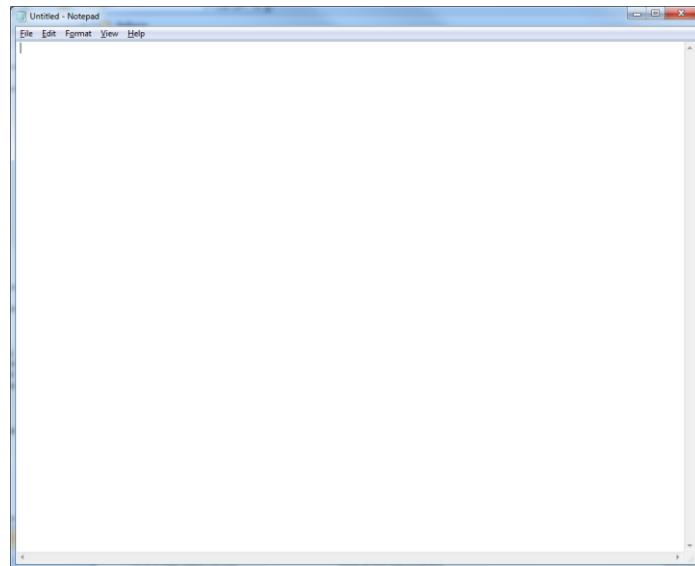


Figure 113. Empty notepad prior to uploading data from scanner

Change Font in notepad to read Lucida Sans Unicode:

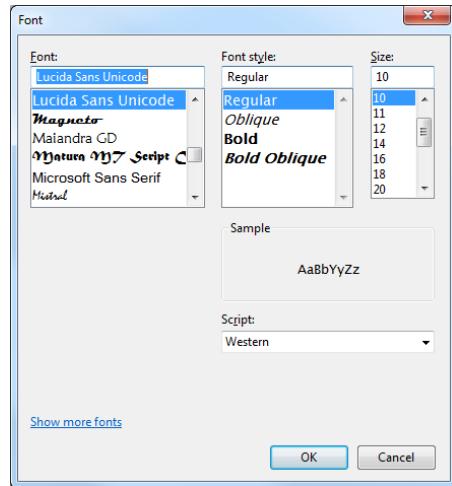


Figure 114. Change font to Lucida Sans Unicode and click OK

Now ready to upload data into notepad. Plug cord into scanner and laptop. Press the apps key.



Figure 115. Press apps key

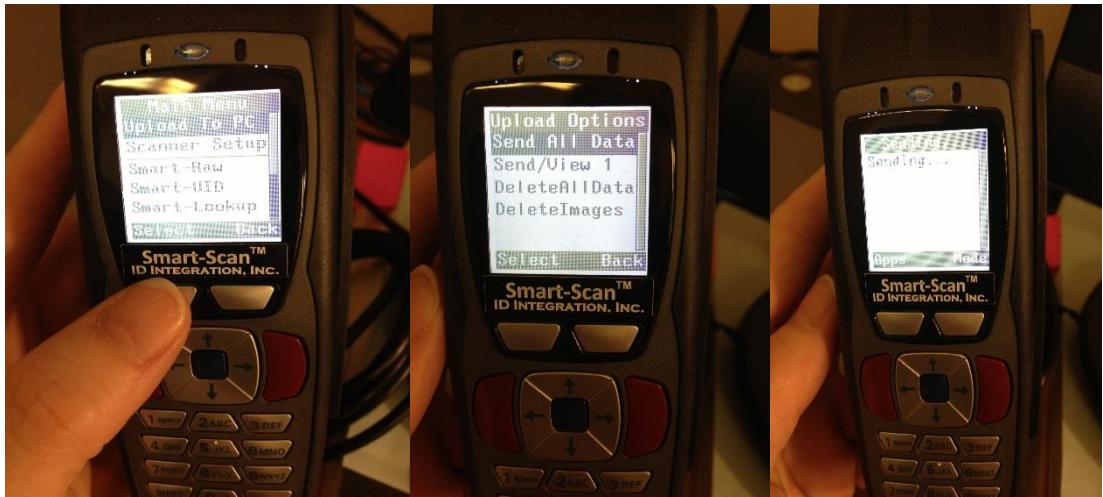


Figure 116. Select upload to PC then select send all data you will see data is sending



Figure 117. Scanner shows data sent

```

Untitled - Notepad
File Edit Format View Help
DONDM791D001OF1USAU0768028
D5RQL2182K1017-1RU9500164
D5RQL2182K1000-1080294

6 UIDErrors...ISO-15434-Err-Wrong_Format
***UID Error** Missing or Invalid ISO-15434 prefix. First 3 characters should be D> .
**UID Error** Missing or Invalid ISO-15434 record separator. 4th character should be Ascii 30.
**UID Error** Missing or Invalid ISO-15434 group separator. 7th character should be Ascii 29.
**UID Error** Missing or Invalid ISO-15434 record separator and last character should be Ascii 30.
**UID Error** Missing or Invalid ISO-15434 end of transmission suffix. Last character should be Ascii 4.
**UID Error** Illegal ISO-15434 prefix, data format, and/or suffix. Further analysis not possible until these errors are resolved.
ISORefID=1784 (FAIL) :Separator=5 (FAIL) :ISOsuffix=6 (FAIL)
Construct=15434 Struct=1 Prefix=>▲▲ ;Separator=> ;Suffix=>▲▲
Format=30 (FAIL) Valid 2-character options are 05,06,12,DD ;IAC= ;Construct=
Data Segment 1: Prefix= ;Value=
**EndReport**

```

Figure 118. Notepad showing data from scanner

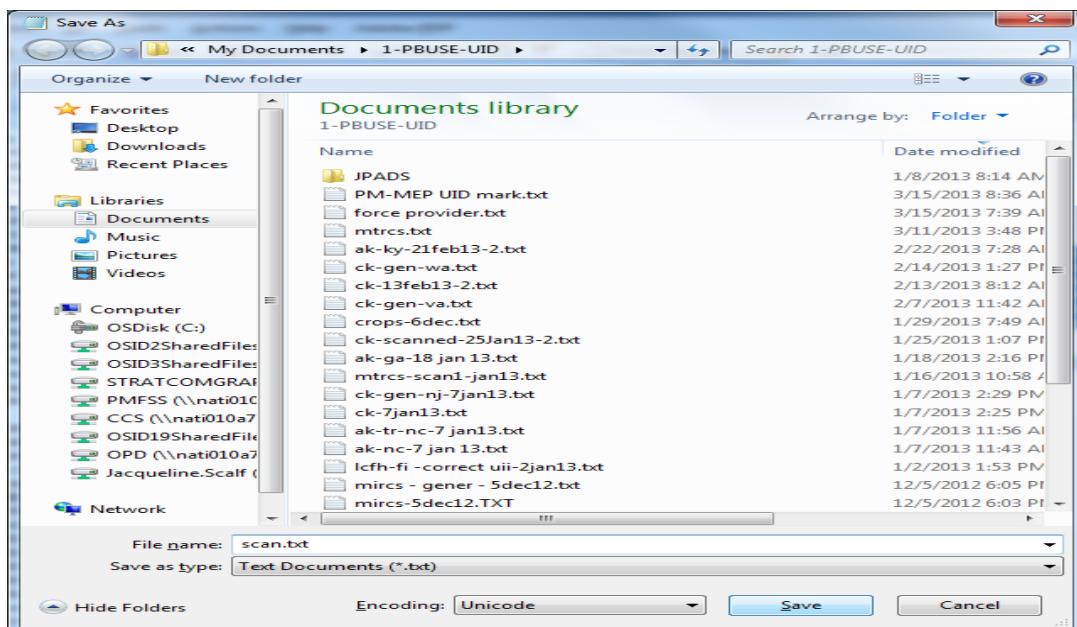


Figure 119. File save as the change the encoding to Unicode and click save

After data has been uploaded and the email sent, you can delete the data from the scanner so we don't have duplicates.

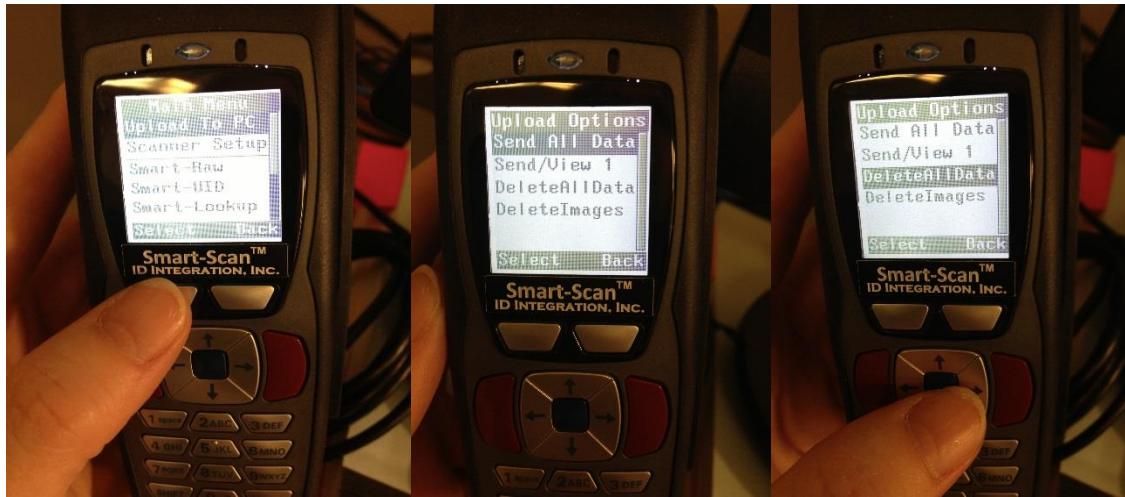


Figure 120. Click apps, upload to PC, upload options, deleteall

## APPENDIX F. USING WISE TO TRANSFER EQUIPMENT

This appendix provides step by step instructions on utilizing WISE as a workaround to field bulk assets to tactical units. PEO C3T modified its Total Package Fielding Business practice to support the ASA(ALT) IUID requirement.

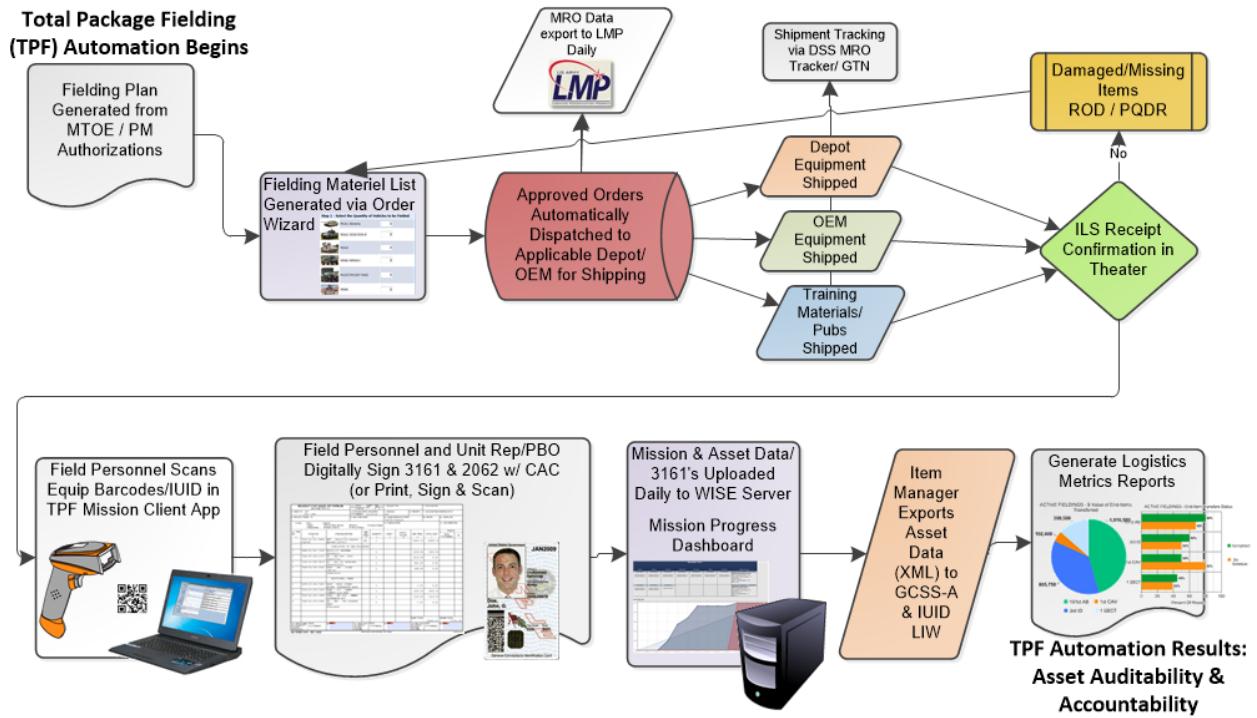


Figure 121. WISE process flow

# WISE TPF Mission Client

- WISE accounts for **ALL** fielded equipment
- ALL transferred assets captured – IUID serialized as well as non-serialized
- IUID, Serial Number, Software/Firmware Version data captured



Add to Vehicle System Transfer

\*Products in GREEN already exist in fielding transfer.

Product	Revision	NSN	Item Category	Default Quantity
(RT-1954A/U)		5820-01-619-5234	Components Of End Item (C)	1
Part Number : 01-P53816R002				
AMPLIFIER RADIO FREQUENCY		5996-01-643-0444	Components Of End Item (C)	1
Part Number : 1600831-2				
Jumper Cable Assembly		5995-01-648-2358	Components Of End Item (C)	1
Part Number : 1600831-3				
USB Load Cable		5995-01-611-3088	Components Of End Item (C)	1
Part Number : A3340182				
Ground Strap		5999-01-648-1297	Components Of End Item (C)	1
Part Number : 2100532-501				
VIPER LOCKING HARDWARE KIT		5340-01-656-1908	Components Of End Item (C)	1
Part Number : B2011-001				
Battery Storage		6140-01-619-6702	Components Of End Item (C)	1
Part Number : 1600811				
Padlock		5340-00-158-3805	Additional Authorization List	1
Part Number : A5200GLN				
Battery Storage		6140-01-604-9912	Components Of End Item (C)	1
Part Number : 01-P				

Add/Scan Assets

Add/Scan Item (Auto Placement)

Product Lookup: 0617V233861P01-P53816R002ST32908

Serial Number: Qty: 1

Maintain Selected Product

Product:

Add to Transfer Close

Recently Added Assets

Product Title	Serial	Qty
(RT-1954A/U)	T32908	1

Figure 122. Items used for WISE

# WISE TPF Mission Management IUID Data Exports

Mission Title: 2/1 AD CS-17	Mission Number:	Mission Coordinator: Norman Hall			
Date: 03/08/2017 - 04/07/2017	Installation: Fort Bliss, TX	Mission Status: Completed			
UIC - Unit: UIC - Unit Name	Document Number: Document Number				
XML Export: Export	Serial Number Search:				
<input type="button" value="Apply"/> <input type="button" value="Clear"/>					
<input type="button" value="Generate Export File"/> <input type="button" value="Apply Document Number"/> <input type="button" value="Clear Document Number"/>					
GCSSA Export					
	UIC	DODAAC	Transfer Type	Fielded Product	DocNum
IUID Data Export	WAPGTO	W58B0U	System Transfer	AN/PRC-155(V)2	W6NZ0670750003
PBUSE Asset Adjustment	WH5BA0	W91X69	Vehicle System Transfer	AN/VRC-116(V)1	W6NZ0670870015
PBUSE Lateral Transfer	WHSBB0	W91XFZ	System Transfer	AN/PRC-155(V)2	W6NZ0670740001
PBUSE Asset Adjustment & Lateral Transfer	WHSBC0	W91XQC	Vehicle System Transfer	AN/VRC-116(V)1	W6NZ0670870004
28-Mar-2017 23:29:20 1-1 CAV C TRP					

- WISE enables Asset data exports into XML and Excel formats for importing into Army Enterprise Systems (GCSS-A, PBUSE, IUID LIW)

Figure 123. WISE creates xml files

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## **APPENDIX G. IUID RELATED DFARS CLAUSES AND DIDS**

This appendix provides all of the DFARS and DIDS that must be added to contracts in order to be IUID compliant. Always check for updates prior to using language posted in this document to ensure you are referencing the latest version.

### **DFARS 211.274-2 Policy for Unique Item Identification**

\*NOTE. This DFARS clause can be referenced at [http://www.acq.osd.mil/dpap/dars/dfars/html/current/211\\_2.htm#211.274-2](http://www.acq.osd.mil/dpap/dars/dfars/html/current/211_2.htm#211.274-2).

This information is taken from DFARS 211.274-2 Policy for Unique Item Identification

(a) It is DOD policy that DOD item unique identification, or a DOD recognized unique identification equivalent, is required for all delivered items, including items of contractor-acquired property delivered on contract line items (see PGI 245.402-71 (DFARS/PGI view) for guidance when delivery of contractor acquired property is required)—

- (1) For which the Government's unit acquisition cost is \$5,000 or more;
- (2) For which the Government's unit acquisition cost is less than \$5,000 when the requiring activity determines that item unique identification is required for mission essential or controlled inventory items; or
- (3) Regardless of value for any—

- (i) DOD serially managed item (reparable or non-reparable) or subassembly, component, or part embedded within a subassembly, component, or part;
- (ii) Parent item (as defined in 252.211-7003(a)) that contains the embedded subassembly, component, or part;
- (iii) Warranted serialized item;
- (iv) Item of special tooling or special test equipment, as defined at FAR 2.101, for a major defense acquisition program that is designated for preservation and storage in accordance with the requirements of section 815 of the National Defense Authorization Act for Fiscal Year 2009 (Pub. L. 110-417); and
- (v) High risk item identified by the requiring activity as vulnerable to supply chain threat, a target of cyber threats, or counterfeiting.

(b) *Exceptions.* The contractor will not be required to provide DOD item unique identification if—

- (1) The items, as determined by the head of the agency, are to be used to support a contingency operation or to facilitate defense against or recovery from nuclear, biological, chemical, or radiological attack; or
- (2) A determination and findings has been executed concluding that it is more cost effective for the Government requiring activity to assign, mark, and register the unique item identifier after delivery, and the item is either acquired

from a small business concern, or is a commercial item acquired under FAR part 12 or part 8.

- (i) The determination and findings shall be executed by—
  - (A) The Component Acquisition Executive for an ACAT I program; or
  - (B) The head of the contracting activity for all other programs.
- (ii) The DOD Unique Identification Policy Office must receive a copy of the determination and findings required by paragraph (b)(2)(i) of this subsection. Follow the procedures at PGI 211.274-2 (DFARS/PGI view).

### **DFARS 252.211-7003. Item identification and valuation**

\*NOTE. This DFARS clause can be referenced at <http://www.acq.osd.mil/dpap/dars/dfars/html/current/252211.htm#252.211-7003>.

This information is taken from DFARS 252.211-7003. Item identification and valuation

As prescribed in 211.274-6(a) (1), use the following clause:

(a) *Definitions*. As used in this clause—

“Automatic identification device” means a device, such as a reader or interrogator, used to retrieve data encoded on machine-readable media.

“Concatenated unique item identifier” means—

(1) For items that are serialized within the enterprise identifier, the linking together of the unique identifier data elements in order of the issuing agency code, enterprise identifier, and unique serial number within the enterprise identifier; or

(2) For items that are serialized within the original part, lot, or batch number, the linking together of the unique identifier data elements in order of the issuing agency code; enterprise identifier; original part, lot, or batch number; and serial number within the original part, lot, or batch number.

“Data matrix” means a two-dimensional matrix symbology, which is made up of square or, in some cases, round modules arranged within a perimeter finder pattern and uses the Error Checking and Correction 200 (ECC200) specification found within International Standards Organization (ISO)/International Electro-technical Commission (IEC) 16022.

“Data qualifier” means a specified character (or string of characters) that immediately precedes a data field that defines the general category or intended use of the data that follows.

“DOD recognized unique identification equivalent” means a unique identification method that is in commercial use and has been recognized by DOD. All DOD recognized unique identification equivalents are listed at [http://www.acq.osd.mil/dpap/pdi/uid/iuid\\_equivalents.html](http://www.acq.osd.mil/dpap/pdi/uid/iuid_equivalents.html).

“DOD item unique identification” means a system of marking items delivered to DOD with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items. For items that are serialized within the enterprise identifier, the unique item

identifier shall include the data elements of the enterprise identifier and a unique serial number. For items that are serialized within the part, lot, or batch number within the enterprise identifier, the unique item identifier shall include the data elements of the enterprise identifier; the original part, lot, or batch number; and the serial number.

“Enterprise” means the entity (e.g., a manufacturer or vendor) responsible for assigning unique item identifiers to items.

“Enterprise identifier” means a code that is uniquely assigned to an enterprise by an issuing agency.

“Government’s unit acquisition cost” means—

- (1) For fixed-price type line, subline, or exhibit line items, the unit price identified in the contract at the time of delivery;
- (2) For cost-type or undefinitized line, subline, or exhibit line items, the Contractor’s estimated fully burdened unit cost to the Government at the time of delivery; and

(3) For items produced under a time-and-materials contract, the Contractor’s estimated fully burdened unit cost to the Government at the time of delivery.

“Issuing agency” means an organization responsible for assigning a globally unique identifier to an enterprise, as indicated in the Register of Issuing Agency Codes for ISO/IEC 15459, located at [http://www.aimglobal.org/?Reg\\_Authority15459](http://www.aimglobal.org/?Reg_Authority15459).

“Issuing agency code” means a code that designates the registration (or controlling) authority for the enterprise identifier.

“Item” means a single hardware article or a single unit formed by a grouping of subassemblies, components, or constituent parts.

“Lot or batch number” means an identifying number assigned by the enterprise to a designated group of items, usually referred to as either a lot or a batch, all of which were manufactured under identical conditions.

“Machine-readable” means an automatic identification technology media, such as bar codes, contact memory buttons, radio frequency identification, or optical memory cards.

“Original part number” means a combination of numbers or letters assigned by the enterprise at item creation to a class of items with the same form, fit, function, and interface.

“Parent item” means the item assembly, intermediate component, or subassembly that has an embedded item with a unique item identifier or DOD recognized unique identification equivalent.

“Serial number within the enterprise identifier” means a combination of numbers, letters, or symbols assigned by the enterprise to an item that provides for the differentiation of that item from any other like and unlike item and is never used again within the enterprise.

“Serial number within the part, lot, or batch number” means a combination of numbers or letters assigned by the enterprise to an item that provides for the differentiation of that item from any other like item within a part, lot, or batch number assignment.

“Serialization within the enterprise identifier” means each item produced is assigned a serial number that is unique among all the tangible items produced by the enterprise and is never used again. The enterprise is responsible for ensuring unique serialization within the enterprise identifier.

“Serialization within the part, lot, or batch number” means each item of a particular part, lot, or batch number is assigned a unique serial number within that part, lot, or batch number assignment. The enterprise is responsible for ensuring unique serialization within the part, lot, or batch number within the enterprise identifier.

“Type designation” means a combination of letters and numerals assigned by the Government to a major end item, assembly or subassembly, as appropriate, to provide a convenient means of differentiating between items having the same basic name and to indicate modifications and changes thereto.

“Unique item identifier” means a set of data elements marked on items that is globally unique and unambiguous. The term includes a concatenated unique item identifier or a DOD recognized unique identification equivalent.

“Unique item identifier type” means a designator to indicate which method of uniquely identifying a part has been used. The current list of accepted unique item identifier types is maintained at

[http://www.acq.osd.mil/dpap/pdi/uid/uui\\_types.html](http://www.acq.osd.mil/dpap/pdi/uid/uui_types.html).

(b) The Contractor shall deliver all items under a contract line, subline, or exhibit line item.

(c) *Unique item identifier.*

(1) The Contractor shall provide a unique item identifier for the following:

(i) Delivered items for which the Government’s unit acquisition cost is \$5,000 or more, except for the following line items:

Contract Line, Subline, or  
Exhibit Line Item Number      Item  
Description \_\_\_\_\_

(ii) Items for which the Government’s unit acquisition cost is less than \$5,000 that are identified in the Schedule or the following table:

Contract Line, Subline, or  
Exhibit Line Item Number      Item  
Description \_\_\_\_\_

*(If items are identified in the Schedule, insert “See Schedule in this table.)*

(iii) Subassemblies, components, and parts embedded within delivered items, items with warranty requirements, DOD serially managed repairable and DOD serially managed non-repairables as specified in Attachment Number \_\_\_\_.

(iv) Any item of special tooling or special test equipment as defined in FAR 2.101 that have been designated for preservation and storage for a Major Defense Acquisition Program as specified in Attachment Number \_\_\_\_.

- (v) Any item not included in (i), (ii), (iii), or (iv) for which the contractor creates and marks a unique item identifier for traceability.
- (2) The unique item identifier assignment and its component data element combination shall not be duplicated on any other item marked or registered in the DOD Item Unique Identification Registry by the contractor.
- (3) The unique item identifier component data elements shall be marked on an item using two dimensional data matrix symbology that complies with ISO/IEC International Standard 16022, Information technology – International symbology specification – Data matrix; ECC200 data matrix specification.
- (4) Data syntax and semantics of unique item identifiers. The Contractor shall ensure that—
  - (i) The data elements (except issuing agency code) of the unique item identifier are encoded within the data matrix symbol that is marked on the item using one of the following three types of data qualifiers, as determined by the Contractor:
    - (A) Application Identifiers (AIs) (Format Indicator 05 of ISO/IEC International Standard 15434), in accordance with ISO/IEC International Standard 15418, Information Technology – EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance and ANSI MH 10.8.2 Data Identifier and Application Identifier Standard.
    - (B) Data Identifiers (DIs) (Format Indicator 06 of ISO/IEC International Standard 15434), in accordance with ISO/IEC International Standard 15418, Information Technology – EAN/UCC Application Identifiers and Fact Data Identifiers and Maintenance and ANSI MH 10.8.2 Data Identifier and Application Identifier Standard.
    - (C) Text Element Identifiers (Format Indicator 12 of ISO/IEC International Standard 15434), in accordance with the Air Transport Association Common Support Data Dictionary; and
  - (ii) The encoded data elements of the unique item identifier conform to the transfer structure, syntax, and coding of messages and data formats specified for Format Indicators 05, 06, and 12 in ISO/IEC International Standard 15434, Information Technology – Transfer Syntax for High Capacity Automatic Data Capture Media.
- (5) Unique item identifier.
  - (i) The Contractor shall—
    - (A) Determine whether to—
      - (1) Serialize within the enterprise identifier;
      - (2) Serialize within the part, lot, or batch number; or
      - (3) Use a DOD recognized unique identification equivalent (e.g. Vehicle Identification Number); and
    - (B) Place the data elements of the unique item identifier (enterprise identifier; serial number; DOD recognized unique identification equivalent; and for serialization within the part, lot, or batch number only: original part, lot, or batch number) on items requiring marking by

paragraph (c)(1) of this clause, based on the criteria provided in MIL-STD-130, Identification Marking of U.S. Military Property, latest version; (C) Label shipments, storage containers and packages that contain uniquely identified items in accordance with the requirements of MIL-STD-129, Military Marking for Shipment and Storage, latest version; and (D) Verify that the marks on items and labels on shipments, storage containers, and packages are machine readable and conform to the applicable standards. The contractor shall use an automatic identification technology device for this verification that has been programmed to the requirements of Appendix A, MIL-STD-130, latest version.

(ii) The issuing agency code—

(A) Shall not be placed on the item; and

(B) Shall be derived from the data qualifier for the enterprise identifier.

(d) For each item that requires item unique identification under paragraph (c)(1)(i), (ii), or (iv) of this clause or when item unique identification is provided under paragraph

(c)(1)(v), in addition to the information provided as part of the Material Inspection and Receiving Report specified elsewhere in this contract, the Contractor shall report at the time of delivery, as part of the Material Inspection and Receiving Report, the following information:

(1) Unique item identifier.

(2) Unique item identifier type.

(3) Issuing agency code (if concatenated unique item identifier is used).

(4) Enterprise identifier (if concatenated unique item identifier is used).

(5) Original part number (if there is serialization within the original part number).

(6) Lot or batch number (if there is serialization within the lot or batch number).

(7) Current part number (optional and only if not the same as the original part number).

(8) Current part number effective date (optional and only if current part number is used).

(9) Serial number (if concatenated unique item identifier is used).

(10) Government's unit acquisition cost.

(11) Unit of measure.

(12) Type designation of the item as specified in the contract schedule, if any.

(13) Whether the item is an item of Special Tooling or Special Test Equipment.

(14) Whether the item is covered by a warranty.

(e) For embedded subassemblies, components, and parts that require DOD item unique identification under paragraph (c)(1)(iii) of this clause or when item unique identification is provided under paragraph (c)(1)(v), the Contractor shall report as part of the Material Inspection and Receiving Report specified elsewhere in this contract, the following information:

(1) Unique item identifier of the parent item under paragraph (c)(1) of this

- clause that contains the embedded subassembly, component, or part.
- (2) Unique item identifier of the embedded subassembly, component, or part.
  - (3) Unique item identifier type. \*\*
  - (4) Issuing agency code (if concatenated unique item identifier is used).\*\*
  - (5) Enterprise identifier (if concatenated unique item identifier is used).\*\*
  - (6) Original part number (if there is serialization within the original part number).\*\*
  - (7) Lot or batch number (if there is serialization within the lot or batch number).\*\*
  - (8) Current part number (optional and only if not the same as the original part number).\*\*
  - (9) Current part number effective date (optional and only if current part number is used).\*\*
  - (10) Serial number (if concatenated unique item identifier is used). \*\*
  - (11) Description.
- \*\* Once per item.
- (f) The Contractor shall submit the information required by paragraphs (d) and (e) of this clause as follows:
- (1) End items shall be reported using the receiving report capability in WAWF in accordance with the clause at 252.232-7003. If WAWF is not required by this contract, and the contractor is not using WAWF, follow the procedures at <http://dodprocurementtoolbox.com/site/uidregistry/>.
  - (2) Embedded items shall be reported by one of the following methods—
    - (i) Use of the embedded items capability in WAWF;
    - (ii) Direct data submission to the IUID Registry following the procedures and formats at <http://dodprocurementtoolbox.com/site/uidregistry/>; or
    - (iii) Via WAWF as a deliverable attachment for exhibit line item number (fill in) \_\_\_, Unique Item Identifier Report for Embedded Items, Contract Data Requirements List, DD Form 1423.
- (g) Subcontracts. If the Contractor acquires by subcontract, any item(s) for which item unique identification is required in accordance with paragraph (c)(1) of this clause, the Contractor shall include this clause, including this paragraph (g), in the applicable subcontract(s), including subcontracts for commercial items.

(End of clause)

#### 7.2.2.1. IUID Equivalents ((DPAP), n.d.)

IUID Equivalents are unique identifiers that meet established criteria to allow for their usage as UIIs. This link provides an overview of the criteria and indicates that accepted IUID Equivalents identified thus far.

The Final DFARS Rule on ‘Unique Item Identification and Valuation’ was published in the Federal Register on April 22, 2005. Paragraph 211.274-2(a) states that unique item identification, or a DOD recognized unique identification equivalent, is required for situations enumerated in subparagraphs (1), (2), (3), and (4) of 211.274-2(a). A commercial

identifier can be considered by the DOD for use as a DOD IUID Equivalent if it meets all of these criteria.

Must contain an enterprise identifier

Must uniquely identify an individual item within an enterprise identifier, product or part number, and

Must have an existing Data Identifier (DI) or Application Identifier (AI) listed in American National Standard (ANS) MH10.8.2, Data Identifier and Application Identifier Standard.

The commercial unique identifiers meeting these criteria that the Department recognizes as DOD IUID equivalents are the:

EAN.UCC Global Individual Asset Identifier (GIAI) for serially-managed assets,

EAN.UCC Global Returnable Asset Identifier (GRAI) for returnable assets, and

ISO Vehicle Identification Number (VIN) for vehicles.

Electronic Serial Number (ESN) for cellular telephones only

Mobile Equipment Identifier (MEID) for cellular telephones only

Cellular Mobile Telephone Identifier (CMTI) for cellular telephones only

In addition to these equivalents; the data requirements of 14 CFR Part 45, Identification Registration Marking, for only aircraft, aircraft engines, propellers, and propeller blades and hubs are consistent with the data elements required by our IUID constructs.

### **DFARS 252.211–7007 Reporting of Government-Furnished Property**

\*NOTE. This DFARS clause can be referenced at <http://www.acq.osd.mil/dpap/dars/dfars/html/current/252211.htm#252.211-7007>.

According to DFARS 252.211–7007 Reporting of Government-Furnished Property

As prescribed in 211.274-6(b), use the following clause:

(a) Definitions. As used in this clause—

“Commercial and Government entity (CAGE) code” means—

(i) A code assigned by the Defense Logistics Agency Logistics Information Service to identify a commercial or Government entity; or  
(ii) A code assigned by a member of the North Atlantic Treaty Organization that the Defense Logistics Agency Logistics Information Service records and maintains in the CAGE master file. The type of code is known as an “NCAGE code.”

“Contractor-acquired property” has the meaning given in FAR clause 52.245-1. Upon acceptance by the Government, contractor-acquired property becomes Government-furnished property.

“Government-furnished property” has the meaning given in FAR clause 52.245-1.

“Item unique identification (IUID)” means a system of assigning, reporting,

and marking DOD property with unique item identifiers that have machine-readable data elements to distinguish an item from all other like and unlike items.

“IUID Registry” means the DOD data repository that receives input from both industry and Government sources and provides storage of, and access to, data that identifies and describes tangible Government personal property. The IUID Registry is—

- (i) The authoritative source of Government unit acquisition cost for items with unique item identification (see DFARS 252.211-7003) that were acquired after January 1, 2004;
- (ii) The master data source for Government-furnished property; and
- (iii) An authoritative source for establishing the acquisition cost of end-item equipment.

“NSN” means a 13-digit stock number used to identify items of supply. It consists of a four-digit Federal Supply Code and a nine-digit National Item Identification Number.

“Nomenclature” means—

- (i) The combination of a Government-assigned type designation and an approved item name;
- (ii) Names assigned to kinds and groups of products; or
- (iii) Formal designations assigned to products by customer or supplier (such as model number or model type, design differentiation, or specific design series or configuration).

“Part or identifying number” means the identifier assigned by the original design activity, or by the controlling nationally recognized standard, that uniquely identifies (relative to that design activity) a specific item.

“Reparable” means an item, typically in unserviceable condition, furnished to the Contractor for maintenance, repair, modification, or overhaul.

“Serially managed item” means an item designated by DOD to be uniquely tracked, controlled, or managed in maintenance, repair, and/or supply systems by means of its serial number.

“Supply condition code” means a classification of materiel in terms of readiness for issue and use or to identify action underway to change the status of materiel (see

[http://www2.dla.mil/j-6/dlmso/elibrary/manuals/dlm/dlm\\_pubs.asp](http://www2.dla.mil/j-6/dlmso/elibrary/manuals/dlm/dlm_pubs.asp)).

“Unique item identifier (UII)” means a set of data elements permanently marked on an item that is globally unique and unambiguous and never changes, in order to provide traceability of the item throughout its total life cycle. The term includes a concatenated UII or a DOD recognized unique identification equivalent.

“Unit acquisition cost” has the meaning given in FAR clause 52.245-1.

(b) *Reporting Government-furnished property to the IUID Registry.* Except as provided in paragraph (c) of this clause, the Contractor shall report, in accordance with paragraph (f), Government-furnished property to the IUID Registry as follows:

- (1) Up to and including December 31, 2013, report serially managed Government-furnished property with a unit-acquisition cost of \$5,000 or greater.
- (2) Beginning January 1, 2014, report—
  - (i) All serially managed Government-furnished property, regardless of unit-acquisition cost; and
  - (ii) Contractor receipt of non-serially managed items. Unless tracked as an individual item, the Contractor shall report non-serially managed items to the Registry in the same unit of packaging, e.g., original manufacturer's package, box, or container, as it was received.
- (c) *Exceptions.* Paragraph (b) of this clause does not apply to—
  - (1) Contractor-acquired property;
  - (2) Property under any statutory leasing authority;
  - (3) Property to which the Government has acquired a lien or title solely because of partial, advance, progress, or performance-based payments;
  - (4) Intellectual property or software;
  - (5) Real property; or
  - (6) Property released for work in process.
- (d) *Data for reporting to the IUID Registry.* To permit reporting of Government-furnished property to the IUID Registry, the Contractor's property management system shall enable the following data elements in addition to those required by paragraph (f)(1)(iii) (A)(1) through (3), (5), (7), (8), and (10) of the Government Property clause of this contract (FAR 52.245-1):
  - (1) Received/Sent (shipped) date.
  - (2) Status code.
  - (3) Accountable Government contract number.
  - (4) CAGE code on the accountable Government contract.
  - (5) Mark record.
    - (i) Bagged or tagged code (for items too small to individually tag or mark).
    - (ii) Contents (the type of information recorded on the item, e.g., item internal control number).
    - (iii) Effective date (date the mark is applied).
    - (iv) Added or removed code/flag.
    - (v) Marker code (designates which code is used in the marker identifier, e.g., D=CAGE, UN=DUNS, LD=DODAAC).
    - (vi) Marker identifier, e.g., Contractor's CAGE code or DUNS number.
    - (vii) Medium code; how the data is recorded, e.g., barcode, contact memory button.
    - (viii) Value, e.g., actual text or data string that is recorded in its human-readable form.
    - (ix) Set (used to group marks when multiple sets exist).
  - (6) Appropriate supply condition code, required only for reporting of reparables, per Appendix 2 of DOD 4000.25-2-M, Military Standard

Transaction Reporting and Accounting Procedures manual ([http://www2.dla.mil/j-6/dlmso/elibrary/manuals/dlm/dlm\\_pubs.asp](http://www2.dla.mil/j-6/dlmso/elibrary/manuals/dlm/dlm_pubs.asp)).

(e) When Government-furnished property is in the possession of subcontractors, Contractors shall ensure that reporting is accomplished using the data elements required in paragraph (d) of this clause.

(f) Procedures for reporting of Government-furnished property. Except as provided in paragraph (c) of this clause, the Contractor shall establish and report to the IUID Registry the information required by FAR clause 52.245-1, paragraphs (e) and (f)(1)(iii), in accordance with the data submission procedures at [http://www.acq.osd.mil/dpap/pdi/uid/data\\_submission\\_information.html](http://www.acq.osd.mil/dpap/pdi/uid/data_submission_information.html).

(g) Procedures for updating the IUID Registry.

(1) Except as provided in paragraph (g)(2), the Contractor shall update the IUID Registry at <https://iuid.logisticsinformationservice.dla.mil/> for changes in status, mark, custody, condition code (for reparables only), or disposition of items that are—

(i) Received by the Contractor;

(ii) Delivered or shipped from the Contractor's plant, under Government instructions, except when shipment is to a subcontractor or other location of the Contractor;

(iii) Consumed or expended, reasonably and properly, or otherwise accounted for, in the performance of the contract as determined by the Government property administrator, including reasonable inventory adjustments;

(iv) Disposed of; or

(v) Transferred to a follow-on or other contract.

(2) The Contractor need not report to the IUID Registry those transactions reported or to be reported to the following DCMA etools:

(i) Plant Clearance Automated Reutilization and Screening System (PCARSS); or

(ii) Lost, Theft, Damaged or Destroyed (LTDD) system.

(3) The contractor shall update the IUID Registry as transactions occur or as otherwise stated in the Contractor's property management procedure.

(End of clause)

### **DFARS 252.211–7008 Use of Government-assigned Serial Numbers**

\*NOTE. This DFARS clause can be referenced at:

<http://www.acq.osd.mil/dpap/dars/dfars/html/current/252211.htm#252.211-7008>.

According to DFARS 252.211–7008 Use of Government-assigned Serial Numbers.

As prescribed in 211.274-6(c), use the following clause:

(a) Definitions. As used in this clause—

“Government-assigned serial number” means a combination of letters or numerals in a fixed human-readable information format (text) conveying information about a major end item, which is provided to a contractor by the requiring activity with accompanying technical data instructions for marking the Government-assigned serial number on major end items to be delivered to the Government.

“Major end item” means a final combination of component parts and/or materials which is ready for its intended use and of such importance to operational readiness that review and control of inventory management functions (procurement, distribution, maintenance, disposal, and asset reporting) is required at all levels of life cycle management. Major end items include aircraft; ships; boats; motorized wheeled, tracked, and towed vehicles for use on highway or rough terrain; weapon and missile end items; ammunition; and sets, assemblies, or end items having a major end item as a component.

“Unique item identifier (UII)” means a set of data elements permanently marked on an item that is globally unique and unambiguous and never changes in order to provide traceability of the item throughout its total life cycle. The term includes a concatenated UII or a DOD-recognized unique identification equivalent.

(b) The Contractor shall mark the Government-assigned serial numbers on those major end items as specified by line item in the Schedule, in accordance with the technical instructions for the placement and method of application identified in the terms and conditions of the contract.

(c) The Contractor shall register the Government-assigned serial number along with the major end item’s UII at the time of delivery in accordance with the provisions of the clause at

DFARS 252.211-7003(d).

(d) The Contractor shall establish the UII for major end items for use throughout the life of the major end item. The Contractor may elect, but is not required, to use the Government-assigned serial number to construct the UII.

(End of clause)

### **DFARS 252.232-7003 Electronic Submission of Payment Requests and Receiving Reports**

\*NOTE. This DFARS clause can be referenced at:  
<http://www.acq.osd.mil/dpap/dars/dfars/html/current/252232.htm#252.232-7003>.

According to DFARS 252.232-7003 Electronic Submission of Payment Requests and Receiving Reports.

As prescribed in 232.7004(a), use the following clause:

(a) Definitions. As used in this clause—

- (1) "Contract financing payment" and "invoice payment" have the meanings given in section 32.001 of the Federal Acquisition Regulation.
  - (2) "Electronic form" means any automated system that transmits information electronically from the initiating system to all affected systems. Facsimile, email, and scanned documents are not acceptable electronic forms for submission of payment requests. However, scanned documents are acceptable when they are part of a submission of a payment request made using WAWF or another electronic form authorized by the Contracting Officer.
  - (3) "Payment request" means any request for contract financing payment or invoice payment submitted by the Contractor under this contract.
  - (4) "Receiving report" means the data required by the clause at 252.246-7000, Material Inspection and Receiving Report.
- (b) Except as provided in paragraph (c) of this clause, the Contractor shall submit payment requests and receiving reports using WAWF, in one of the following electronic formats that WAWF accepts: Electronic Data Interchange, Secure File Transfer Protocol, or World Wide Web input. Information regarding WAWF is available on the Internet at <https://wawf.eb.mil/>.
- (c) The Contractor may submit a payment request and receiving report using other than WAWF only when—
- (1) The Contracting Officer administering the contract for payment has determined, in writing, that electronic submission would be unduly burdensome to the Contractor. In such cases, the Contractor shall include a copy of the Contracting Officer's determination with each request for payment;
  - (2) DOD makes payment for commercial transportation services provided under a Government rate tender or a contract for transportation services using a DOD-approved electronic third party payment system or other exempted vendor payment/invoicing system (e.g., PowerTrack, Transportation Financial Management System, and Cargo and Billing System);
  - (3) DOD makes payment for rendered health care services using the TRICARE Encounter Data System (TEDS) as the electronic format; or
  - (4) When the Government wide commercial purchase card is used as the method of payment, only submission of the receiving report in electronic form is required.
- (d) The Contractor shall submit any non-electronic payment requests using the method or methods specified in Section G of the contract.
- (e) In addition to the requirements of this clause, the Contractor shall meet the requirements of the appropriate payment clauses in this contract when submitting payment requests.
- (End of clause)

#### **DI-MGMT-81803 (2011) IUID Marking Plan**

Always check the DLA Quick Search Assist website to ensure latest approved version of DID at [http://quicksearch.dla.mil/qsDocDetails.aspx?ident\\_number=278262](http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=278262)

According DI-MGMT-81803 (2011) IUID Marking Plan

The IUID Marking Plan details the Contractor's strategy to execute marking requirements identified in the Government Statement of Work (SOW)/Performance Work Statement (PWS)/Objectives, and/or DFARS.

Number: DI-MGMT-81803 Approval Date: 20110719

AMSC Number: 9124

Limitation: N/A

DTIC Applicable: No

GIDEP Applicable: No

Office of Primary Responsibility: 70 (OO-ALC)

Applicable Forms: N/A

Use/relationship: IUID Marking Plan details the Contractor's strategy to execute marking requirements identified in the Government Statement of Work (SOW)/Performance Work Statement (PWS)/Objectives, and/or DFARS. The Plan fully documents the scope of meeting MIL-STD-130 DOD Standard Practice Identification Marking of U.S. Military Property, with the Contractor's marking requirements, marking methodology/strategy, data management, quality assurance, facilities and marking equipment, technical data package requirements, data carrier symbols and print quality, and the master schedule to help the Government manage marking activities in a cost effective and timely manner. To ensure quality, validation, verification, and registration of items being marked, guidance may be gained from two documents: DOD Guide to Uniquely Identifying Items (Assuring valuation, Accountability and Control of Government Property) and DOD Guide to Item Unique Identification Quality. If the quality measuring methodology is non-responsive for desired marking methods, quality levels will be identified within this plan.

This DID contains format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract. This DID may be applied in any contract which contains a requirement for marking parts and equipment with IUID Data Matrix symbols.

Requirements:

1. Reference documents: The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, will be as cited online at Acquisition Streamlining and Standardization Information System (ASSIST) Update at the time of the solicitation.
2. Format. Contractor's format is acceptable.
3. Content. The Marking Plan will cover the following elements:

- 3.1 Describe the minimum item marking requirements
- 3.2 List/Detail items/assets to be marked within the scope of the plan.
- 3.3 Marking Methodology/Strategy
  - 3.3.1 Describe which type of marking methodology will be used (i.e., Direct or Indirect Part Marking, Data Plate Modification, etc.).
  - 3.2 Describe the Imprint Method / Type of Label / Nameplate (i.e., Chemical Etch, Dot Peen, Laser, Thermal Transfer, Ink Jet, Photo Etch, etc.).
  - 3.3.3 Marking Specifications.
    - 3.3.3.1 Identify applicable engineering drawings requiring IUID marking.
    - 3.3.3.2 Machine Readable Mark Generation Instructions.
      - 3.3.3.2.1 Define the construct method (i.e. Construct 0, Construct 1, - 18S, 25S, or Construct 2 – 1P 1T).
      - 3.3.3.2.2 Determine the Enterprise Identifier (EID) (i.e. Cage, DUNS, DoDACC/MAPAC, or GS1).
      - 3.3.3.2.3 Determine the level of serialization (i.e., Part, Lot, Batch, Enterprise, etc.).
      - 3.3.3.2.4 If using Construct 1 – 18S, identify the sequence number generation process.
      - 3.3.3.2.5 Determine other data elements required in the data matrix symbol (30P and 30T).
    - 3.3.3.3 Determine the Human Readable Mark Generation elements to be included on the label.
    - 3.3.3.4 For labels/nameplates, identify which type of material will be used for the creation of the Mark (i.e., Aluminum, Polyacrylic, Metal Foil, Polyester, Polyvinyl, Aluminum Foil, Stainless Steel, etc.).
    - 3.3.3.5 Describe the overall layout of the Mark including (Reference Tech Data as applicable).
      - 3.3.3.5.1 Size (Length, Width, Thickness, etc.).
      - 3.3.3.5.2 Shape (Circle, Square, Rectangle, Rounded Corners, etc.).
      - 3.3.3.5.3 Layout/Order (Location of Human and Machine Readable elements).
      - 3.3.3.5.4 Marking Location on Asset.
      - 3.3.3.5.5 Type of Lettering (Font, Font Size, Color, etc.).
      - 3.3.3.5.6 Attachment Method (Adhesive, Screws, Rivets, Tags, Bag and Tag, Tags and Bands, etc.). For Tag, and Bag/Band and Tag items, provide evidence of why part could not be marked and Government concurrence.
    - Describe the contractor's process for marking legacy parts, GFP, and Property in Possession of Contractor (PIPC) including tooling.
  - 4.1 Data Management.
    - 4.1.1 Describe the systems required to incorporate Serial Number Tracking (SNT) and Parent/Child relationship if any and communicate the IUID data to the Program Manager.

4.1.2 Describe the contractors process/systems required to assign Unique Items Identifiers (UIIs) and register Unique Identification (UID) information to the Department of Defense IUID Registry.

4.1.3 Describe the contractors process/system used to identify and track all warranted items i.e., all items with an extended warranty (more than just the standard contract time and workmanship), provide length of warranty, and date entered service (i.e., via WAWF). Describe how the contractor will mark/use the IUID data on the package and shipping containers.

#### 4.2 Quality Assurance.

4.2.1 Describe the verification process and any sampling techniques which ensure the Machine Readable Information (MRI) complies with applicable standards as prescribed in MIL-STD-130.

4.2.2 Identify a format for reporting verification results to include pass/fail and any acceptance criteria from MIL-STD-130 in paragraph 5 titled Data Matrix symbol quality.

4.2.3 Describe the process for identifying and reporting deficiencies in the mark properties, as well as repair and replacement procedures.

4.2.4 Include UID Contract Data Requirements List (CDRLs) as part of the surveillance method or Quality Assurance processes.

4.2.5 Describe the contractors process used to document UII marking of legacy parts that an IUID Engineering Assessment completed when they are returned to the depot for repair, i.e., Repair Receiving Report (R3).

#### 4.3 Facilities and Marking Equipment.

4.3.1 Describe the facilities, marking equipment, floor space, utilities, environmental and safety elements, etc., required to meet marking requirements on a production basis.

#### 4.4 Technical data package requirements.

#### 4.5 Master Schedule.

### **DI-MGMT-81804A (2013) IUID Marking Activity, Validation, and Verification Report**

Always check the DLA Quick Search Assist website to ensure latest approved version of DID at [http://quicksearch.dla.mil/qsDocDetails.aspx?ident\\_number=278263](http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=278263)

According to DI-MGMT-81804A (2013) IUID Marking Activity, Validation, and Verification Report.

The IUID Marking Activity, Validation and Verification Report is a tabular list providing IUID marking activity, validation and verification data such as: physical asset marking, registration, inventory audits, quality audits, and verification/validation results.

Title: IUID Marking Activity, Validation and Verification Report

Number: DI-MGMT-81804A

Approval Date: 20130212

AMSC Number: F9335

Limitation: N/A

DTIC Applicable: No

GIDEP Applicable: No

Office of Primary Responsibility: 70 (OO-ALC)

Applicable Forms: N/A

Use/relationship: The IUID Marking Activity, Validation and Verification Report is a tabular list providing IUID marking activity, validation and verification data such as: physical asset marking, registration, inventory audits, quality audits, and verification/validation results.

This DID contains format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

This DID may be applied in any contract which contains a requirement for marking parts and equipment with IUID encoded in data matrix symbols.

Requirements:

1. Reference document: MIL-STD-130. The applicable issue of MIL-STD-130 shall be the latest version cited online at Acquisition Streamlining and Standardization Information System (ASSIST) Update, at the time of the solicitation. Other documents referenced in MIL-STD-130 shall also be applied.

2. The Contractor's format is acceptable. Recommend electronic transfer of information.

3. A representative sample of IUID-related data matrix marks on items in each delivered Contract Line Item Number/Sub-Contract Line Item Number/Exhibit Line Item Number (CLIN/SLIN/ELIN) shall be validated and verified. Verification and validation results shall be provided using this report format. Marks failing verification or validation must be replaced with compliant marks prior to government acceptance of the items.

4. The tabular report shall include the following alphanumeric fields:

- 4.1 UII.

- 4.2 UII Type (Construct).

- 4.3 EID.

- 4.4 EID Type (CAGE/NCAGE, DUNS, etc.).

- 4.5 OEM Part Number.

- 4.6 Service Assigned Serial Number (if assigned).

- 4.7 OEM serial number.

- 4.8 Equipment Nomenclature (name and type).

- 4.9 NSN.

- 4.10 Validation Date.

- 4.11 Validation Result (Pass/Fail).

- 4.12 Verification Date.

- 4.13 Verification Result (Pass/Fail).

- 4.14 Other Event/Activity Date\* (optional).
- 4.15 Other Event/Activity\* (optional).
- 4.16 For items marked that “Fail” IUID validation or verification, identify corrective action (whether the item has been re-marked or scrapped).  
Other Event/Activity will be defined in the Contract Data Requirements Lists (CDRLS) if required.
5. The Key attributes for the report are the validation and verification columns which each indicate (Pass/Fail). (NOTE: Most verification apparatus provide electronic records with pass/fail summaries for both verification and validation.) A “Pass” validation value shall be assigned to records whose data matrix symbol(s) properly encode Item Unique Identification data as prescribed in MIL-STD-130 DOD Standard Practice Identification Marking of U.S. Military Property requirements for machine readable information (MRI) marking. A “Pass” verification value shall be assigned to records whose data matrix symbol(s) meet or exceed MIL-STD-130 DOD Standard Practice Identification Marking of U.S. Military Property requirements for data matrix symbol quality.
6. The Contractor shall ensure machine-readable IUID marks required under this contract are permanently placed on the items subjected to contractually-required performance testing prior to that testing; and further shall include all mark serviceability problems in the item’s test report(s).

### **DI-MGMT-81858 (2012) IUID Marking and Verification Report**

Always check the DLA Quick Search Assist website to ensure latest approved version of DID at [http://quicksearch.dla.mil/qsDocDetails.aspx?ident\\_number=278539](http://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=278539)

According to DI-MGMT-81858 (2012) IUID Marking and Verification Report.

The IUID Marking and Verification Report is a tabular list which provides the data resulting from IUID marking activities such as: physical asset marking, registration, verification, inventory audits, quality audits, and other asset life cycle activities. A key attribute for the report is the Verification column which indicates (Pass/Fail) for each IUID marked item that is verified.

Number: DI-MGMT-81858

Approval Date: 20120112

AMSC Number: N9240

Limitation: N/A

DTIC Applicable: No

GIDEP Applicable: No

Office of Primary Responsibility: SH/SEA 04L

Applicable Forms: N/A

**Use, Relationship:** The IUID Marking and Verification Report is a tabular list which provides the data resulting from IUID marking activities such as: physical asset marking, registration, verification, inventory audits, quality audits, and other asset life cycle activities. A key attribute for the report is the Verification column which indicates (Pass/Fail) for each IUID marked item that is verified.

This DID contains format and content preparation instructions for the data product generated by the specific and discrete task requirements delineated in the contract. This DID is applicable in a contract which contains a requirement for marking parts and equipment with IUID data matrix labels.

**Requirements.**

1. Reference documents. The applicable issue of the documents cited herein, including their approval dates and the dates of applicable amendments, notices and revisions, shall be as cited in the contract.
2. Format. The IUID Marking & Verification Report shall be in Contractor's format.
3. Content. The IUID Marking & Verification Report shall be present as specified in MIL-STD-130 and shall also contain:
  - a. UII
  - b. UII Type (Construct)
  - c. EID
  - d. EID Type (CAGE/NCAGE, DUNS, etc.)
  - e. OEM Part Number
  - f. Serial Number
  - g. Equipment Nomenclature (name and type)
  - h. NSN
  - i. Activity/Event
  - j. Activity/Event Date
  - k. Verification (Pass/Fail)

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